

# BASELINE

**Version 3.3**

## **User Manual**

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## Appendix: GIS and ArcInfo Glossary



## 1 Introduction

This document is the User Manual for the Baseline, version 3.3, database and application. Baseline is an ArcInfo database and application for storing, viewing, editing and presenting river data used in making calculations with flow models, such as the computation of Design High Waters and the effects of changes in the floodplain. In addition, the application offers the possibility of generating the various files required for flow models and creating input files for the WAQUA and SOBEK flow models.

The development of the Baseline database and application was commissioned by the Dutch Institute for Inland Water Management and Waste Water Treatment (RIZA), Rivers department, in Arnhem. However, Baseline may be implemented by any organisation requiring the structured storage of river data and/or the linking up of flow models in a GIS environment.

The Baseline database and application have been designed by the Dutch consultancy CSO Adviesbureau voor Milieuonderzoek. The application has been developed by ESRI Nederland. Baseline version 3.3 was built using the Arc Macro Language (AML) for use with at least ArcInfo 7.1.1 on a SUN platform with HP workstations and ArcGIS 8.2 on a Windows NT and Windows XP platform.

Although Baseline was developed as a GIS application, it is mainly intended for the users of flow models. This application only requires a basic knowledge of the principles of a Geographic Information System. The organisation of the applications and its menus is very user-friendly.

The object of this manual is to be a guideline in the use of the Baseline database and application. The User Manual explains the database structure and its use and describes the functionalities of the application. The separate Baseline functions are described on the basis of screen dumps. The chapters of the User Manual are also available on line for each menu item of the application. The application has avoided the use of GIS and ArcInfo terminology as much as possible. However, the use of such specialist terms sometimes proved inevitable. Any GIS and ArcInfo terms used will be explained in an appendix to this manual.

## 2 Reading Guide

Chapter 3 describes the database structure and the files to be saved in the database. In addition, this chapter discusses the use of the database. For an extensive description of the contents, structure and creation of the files, please refer to the document “Protocol Basisbestanden Baseline 3.0” (Baseline 3.0 Basic File Protocol), CSO & ESRI Nederland, report number 98.624, 1998 (in Dutch).

Chapter 4 discusses the functionalities of the application. It describes the objects, the operation and the end results of its functions in detail.

Chapter 5 describes how to start Baseline.

Chapter 6 gives a summary of the Baseline menu bar.

The chapters 7 to 15 deal with the separate functions of the application. They are grouped by chapter, according to the main menu bar. The operation of these functions and the individual buttons, input fields and selection lists is described in detail on the basis of the application windows. The screendumps of these windows have been inserted in the manual.

Finally, the appendix contains a description of any GIS and ArcInfo terminology used. Non-GIS experts are advised to read this appendix first.

## 3 Baseline Database and Files

### 3.1 Structure of the Database

The highest level of the Baseline database distinguishes between **system**, **management** and **area**. At the area level, a distinction is made between Meuse and Rhine, for instance. Each group contains two types of data: basic data and variants. These types are located in separate directories: These directories include:

- basic data: BASISGEG (most recent situation)
- variants: <VARIANT> (e.g. C95, MHW etc.)

Basic data is defined as all (most recent) basic data files for making calculations with flow models. The structure of the basic files must comply with the Baseline 3.0 Basic File Protocol (CSO & ESRI, report number 98.624, 1998, in Dutch). The basic data represents the current situation. It is updated, for instance, upon the release of newer versions of digital river maps or sounding files. Furthermore, the basic files are periodically updated by modifications in the floodplain as a result of licences granted and implemented.

Variants are defined as large-scale modifications to basic files which contain basic data intended for flow model calculations by several users. Contrary to the basic data, the variants do not represent the current, but rather the potential situation.

### 3.2 Database Directory Structure

#### Main structure:

As described in 3.1, the highest level of the database distinguishes between system, management and area. These (sub)directories **must** be located in the ‘..../baseline/’ directory. For example:

BASELINE:      SYSTEEM  
                  BEHEER  
                  MEUSE  
                  RHINE  
                  .....

#### SYSTEEM:

The system data comprises the application software, menus and help texts and all files required for the operation of the application, such as files for the creation of map legends, logos and ecotope clustering coding tables for the purpose of WAQUA roughness schematizations.

#### BEHEER:

The BEHEER main directory does not require a specific directory structure. It is the administrator's responsibility to ensure an orderly structure for his activities. These activities may include the import of files, the export of coverages and the update of data.

The area level contains two types of data or main directories: BASISGEG and <VARIANT>. The directory structure is as follows:

MEUSE            :      BASISGEG  
                          VARIANT\_A  
                          VARIANT\_B

These main directories are subsequently subdivided into several levels. The list below describes their directory structure in detail.

### **BASISGEG:**

The BASISGEG main directory contains the (most recent) basic data for making calculations with flow models. The data is grouped per type in a number of workspaces. They are:

DATA	:	administrative data such as preconditions
GRENZEN	:	area and section delineations
HOOGLIJN	:	line elements representing an elevation interval
HOOGPUNT	:	elevation measurements and soundings
MEETPUNT	:	measuring points and water levels
OPPWATER	:	surface water (other than main channel)
OVERIG	:	files not covered by the other groups
RIVGEOM	:	river geometry files
RUWHEID	:	roughness schematization files
SOBEK	:	specific SOBEK files
TIN	:	elevation models
WAQUA	:	specific WAQUA files.

The files included in the workspaces mentioned above are described in paragraph 3.3. In addition to these workspaces intended for ArcInfo coverages, the following workspaces are available:

IMPORT	:	to store third party files to be imported by the application.
EXPORT	:	to store third party export files created by the application from coverages in the database.
PLOT	:	to store map plotting files created by the application.
METAINFO	:	to store file meta information.

### **<VARIANT>:**

The main directory <variant> contains large-scale modifications to basic files which contain basic data intended for flow model calculations. The data contained in the various variant directories (VARIANT A etc.) is grouped in the same workspaces as described in basic data above.

For instance, the directory structure of the 'ecotoop' file is:

```
...../baseline/rhine/mhw/ruwheid/ecotoop  
(...../baseline/<gebied>/<variant>/ruwheid/ecotoop)
```

### **3.3 Baseline Files**

The workspaces accommodating the Baseline files have been outlined in the previous paragraph. This paragraph summarises the files in these workspaces and their contents per workspace. All files in the Baseline database must meet a number of technical specifications. For these technical specifications and the way in which these basic files are created, please refer to the document "Protocol Basisbestanden Baseline 3.0" (Baseline 3.0 Basic File Protocol), CSO & ESRI Nederland, report number 98.624, 1998 (in Dutch).

<b>DATA:</b>	ASCII files with administrative data such as preconditions. These files do not contain spatial data (polygon, point or line elements) but rather data for the setting up of flow models.		
<b>GRENZEN:</b>	All spatial area delineations such as specified study areas and sections and a polygon file of these sections:		
<b>Name:</b> Normaall Oeverl Secties	<b>Features:</b> lines lines polygons	<b>Contents:</b> normal lines bank lines sections; attributes:	section: 1 = main channel or main section 2 = groyne or bank section 3 = floodplain section
Winbed	lines/polygons	floodplain / area delineation	
<b>HOOGLIJN:</b>	Line elements indicating an elevation interval and required for flow model calculations.		
<b>Name:</b> Bandijk	<b>Features:</b> lines + points	<b>Contents:</b> primary dike and elevation points in m. on the lines versus Normal Amsterdam Level (NAL); attribute lines: number: for conversion to WAQUA attribute points: number: for conversion to WAQUA k_hoogte: crown elevation t_hoogte: toe elevation	
Breukl	lines + points	fault lines and elevation points in m. on the lines versus NAL; attribute lines: number: for conversion to WAQUA attribute points: number: for conversion to WAQUA k_hoogte: crown elevation	
Breukplas	lines + points	fault lines and elevation points in lakes in m. on the lines versus NAL; attribute lines: number: for conversion to WAQUA attribute points: number: for conversion to WAQUA k_hoogte: crown elevation	
Hverschil	lines + points	elevation boundary lines and elevation points in m. on the lines versus NAL; attribute lines: number: for conversion to WAQUA attribute points: number: k_hoogte: crown elevation l_hoogte: bed elevation left side r_hoogte: bed elevation right side overlaat: 1 = weir 0 = no weir	
Kade	lines + points	summer dikes and elevation points in m. on the lines versus NAL; attribute lines: number: for conversion to WAQUA attribute points: number: k_hoogte: crown elevation l_hoogte: bed elevation left side r_hoogte: bed elevation right side	
Krib	lines + points	groynes and elevation points in m. on the lines versus NAL; attribute lines: number: for conversion to WAQUA attribute points: number: k_hoogte: crown elevation l_hoogte: bed elevation left side r_hoogte: bed elevation right side	

**HOOGPUNT:** Elevation data of elevation measurements and soundings of floodplain, main channel, banks and lakes. The elevation data of main channel, banks and lakes is converted to a regular patterns (no kmr data).

Name:	Features:	Contents:
Oeverhgt	points	bank elevation data in m. versus NAL; attributes: hoogte
Plashgt	points	lake elevation data in m. versus NAL; attributes: hoogte
Winbedhgt	points	floodplain elevation data in m. versus NAL; attributes: hoogte
Zombedhgt	points	main channel elevation data in m. versus NAL; attributes: hoogte

**MEETPUNT:** Water level measuring points as well as measured water level files.

Name:	Features:	Contents:
Meetpunt	points	water level measuring points; attributes: mpnaam: measuring point name mpmaxws: maximum water level
Waterstand98	points	water levels measured at measuring points; attributes: mtpnaam: measuring point name mtpmaxws: maximum water level

**OPPWATER:** Surface water files required for the flow models.

Name:	Features:	Contents:
Lakes	polygons	<p>all lakes required for WAQUA and SOBEK;</p> <p>attributes: aangetkt: branched/not branched to the river:</p> <p>0 = no lake, 1 = branched, 2 = not branched</p> <p>mvhgt: surrounding ground level elevation data in m. versus NAL</p>

**OVERIG:** Files not covered by one of the other categories.

Name:	Features:	Contents:
Bronput	points	sources and sinks; attributes: bpnaam: source or sink name
Hwatvry	polygons	high-water-free areas
Knstwrk	lines	structures; attributes: kwnaam: structure name
Pijlers	polygons	bridge piers

**RIVGEOM:** River geometry files:

<b>Name:</b>	<b>Features:</b>	<b>Contents:</b>
Linrech	polygons	left or right bank attributes: oever (left or right or both) 0 = left and right bank 1 = left bank 2 = right bank
River axis Rivierkm	lines lines + points	river axis river kilometre lines (perpendicular to river axis) and kilometer points (on river axis); attribute lines: kilom: river kilometres attribute points: kilom: river kilometres

**RUWHEID:** All vegetation element files and any derived files required for roughness schematizations in flow models.

<b>Name:</b>	<b>Features:</b>	<b>Contents:</b>
Dorp	polygons	village delineation attributes: dorpnaam: village name ruw_code: roughness element code
Ecotoop	polygons	ecotopes; attributes: eco_code: ecotope code
Ecoruw	polygons	clustered ecotopes; this file is created in Baseline; attributes: ruw_code: clustered ecotope/roughness element code
Gebouw	polygons	buildings
Heggen	lines	hedgerows
Houtwal	lines	wooded banks
Laanbepl	lines	lines of trees/vegetation
Ruwheidl	lines	lines of vegetation elements for roughness schematization files; this file is created in Baseline; attributes: ruw_code: roughness element code
Ruwheidv	polygons	areas of roughness elements; this file is created in Baseline; attributes: ruw_code: roughness element code

The user may add several other files, such as:

- a private main channel file (polygons) which subdivides the main channel in several compartments,
- a file with special ecotopes (polygons),
- a polygon element file with special k values (polygons),
- a file with tree lines not included in the basic files (lines),
- a fixed layer file (polygons),
- a file with hedgerows not included in the basic files (lines).

The user may choose any name for these files. All elements in these files must be assigned roughness element codes. To this end, a number of codes has been assigned per file or element type. Baseline checks for the presence of the ruw\_code attribute and whether its values are within the specified code ranges. For a detailed description of these files and their permitted codes, please refer to the document "Protocol Basisbestanden Baseline 3.0" (Baseline 3.0 Basic File Protocol), CSO & ESRI Nederland, report number 98.624, 1998 (in Dutch).

The clustering of ecotopes from the ecotope coverage into so-called 'roughness elements' is performed using a conversion table. Users are not allowed to modify this table and therefore it is accommodated in the SYSTEEM main directory by the name of SLEUTEL.

**SOBEK:** Files specifically required for SOBEK.

**Basic files:**

<b>Name:</b>	<b>Features:</b>	<b>Contents:</b>
Kades	polygons	SOBEK summer dikes (segments): attributes: code: summer dike type code: 0 = not behind summer dikes 1 = primary 2 = secondary insthgt: threshold elevation in m. versus NAL
Sobekvak	polygons	SOBEK compartment boundaries; attributes: vak: SOBEK compartment number teken: contains the text 'aan' or 'uit': indicates whether the compartment is to be drawn in the presentation
Strovoer	polygons	type of flow conveyance; attributes: strovoer: conveyance or retention: 1 = conveyance 2 = retention

**SOBEK input:**

<b>Name:</b>	<b>Features:</b>	<b>Contents:</b>
Hoogwin	grid cells	floodplain bed elevation grid in cm. versus NAL
Hoogzom	grid cells	main and groyne section bed elevation grid in cm. versus NAL
Kadecode	grid cells	SOBEK summer dike code grid
Kadehoog	grid cells	SOBEK summer dike threshold elevation grid in cm. versus NAL
Linrech	grid cells	left or right bank code grid
Plascode	grid cells	lake code grid
Plashoog	grid cells	lake average ground level elevation grid in cm. versus NAL
Secties	grid cells	section code grid
Strovoer	grid cells	flow conveyance type grid
Vakwin	grid cells	floodplain SOBEK compartment grid
Vakzom	grid cells	main channel and bank sections SOBEK compartment grid

In addition, the following ASCII files are stored in Baseline for the purpose of SOBEK (basic files):

- key for conversion of summer dike segments and compartments to summer dike codes and threshold elevations (name to be chosen by user);
- key for conversion of compartments to sections (name to be chosen by user);
- key for conversion of roughness elements and water levels to k values (name to be chosen by user);
- kwaarde.tot: table with water depth, k value and area per section and per roughness element;
- kwaarde.trj: table with average k value per section and per roughness element;
- ruwopp.trj: table with area of roughness elements per section.

**TIN:** The elevation models (bed elevation and water level elevation models) built using Baseline are stored in this workspace. The user may choose any name for the elevation models.

**WAQUA:** Files specifically required for WAQUA.

**WAQUA output:**

Name:	Features:
Drogelijn	lines
Waterhoogte	points
Watervrij	polygons

**Contents:**

line elements rising above the water;  
(name to be chosen by user);  
water levels at water level points;  
(name to be chosen by user);  
attributes: waterhoogte  
water free areas (name to be chosen by user);

**Grid:**

Name:	Features:
Roos-bp_p	points
Roos-bp_v	polygons
Roos-mn_l	lines
Roos-u_v	polygons
Roos-v_v	polygons
Roos-ws_p	points
Roos-ws_v	polygons

**Contents:**

x and y coordinates of WAQUA computation grid bed points;  
attributes: id: point number  
m-coord: m coordinate  
n-coord: n coordinate  
grid polygons with the WAQUA computation grid bed points as  
the centre;  
attributes: id: polygon number  
m-coord: m coordinate  
n-coord: n coordinate  
grid lines of a WAQUA computation grid;  
attributes: type: line type: m (m line) or n (n line)  
value: number of the line  
WAQUA computation grid polygons shifted to the u direction;  
attributes: id: polygon number  
m-coord: m coordinate  
n-coord: n coordinate  
WAQUA computation grid polygons shifted to the v direction;  
attributes: id: polygon number  
m-coord: m coordinate  
n-coord: n coordinate  
x and y coordinates of WAQUA computation grid water level  
points;  
attributes: id: point number  
m-coord: m coordinate  
n-coord: n coordinate  
grid polygons with the WAQUA computation grid water level  
points as the centre;  
attributes: id: polygon number  
m-coord: m coordinate  
n-coord: n coordinate

<b>Output to ArcInfo:</b>		
<b>Name:</b>	<b>Features:</b>	<b>Contents:</b>
Bronpbw_p	points	sources and sinks after WAQUA schematization; attributes: bpnaam: name of the sources/sinks
Kunwkbw_p	lines	structures after WAQUA schematization; attributes: kwnaam: name of the structures
Meetpbw_p	points	measuring points after WAQUA schematization; attributes: mpnaam: name of the measuring points
Ovlbw_l	lines	weirs after WAQUA schematization; attributes: k-hoogte: crown elevation in m. versus NAL l-hoogte: left bed elevation in m. versus NAL r-hoogte: right bed elevation in m. versus NAL type: type of weir: 1 = straight u weir 2 = straight v weir 3 = diagonal weir 4 = diagonal weir 5 = diagonal weir 6 = diagonal weir
Rivkmbw_p	points	river kilometre points after WAQUA schematization; attributes: kilom: river kilometres
Rivkmbw_l	lines	river kilometre lines after WAQUA schematization; attributes: kilom: river kilometres
Rrbbw_v	polygons	area delineation after WAQUA schematization;
Ruwlbw_l	lines	'roughness lines' after WAQUA schematization; attributes: ruw-code: 'roughness line' code lengte: 'roughness line' relative length
Srrbbw_l	lines	'schotjes' after WAQUA schematization;
Shvvlbw_l	lines	'schotjes' after WAQUA schematization;
Uitvlocbw_p	points	output locations after WAQUA schematization; attributes: naam: name of the output locations

In addition, the following ASCII files are stored in Baseline for the purpose of WAQUA:

**Grid:**

- <rgf file>.rgf: x and y coordinates grid lines of WAQUA computation grid (name to be chosen by user);

**Input for BASWAQ:**

- bodemh.asc: m coordinates, n coordinates and bed elevation;
- bronput.gen and bronput.asc: x and y coordinates of sources and sinks, respectively, including name and number;
- kunstwerk.gen and kunstwerk.asc: x and y coordinates of structures, including structure name and number;
- meetp.gen and meetp.asc: x and y coordinates of measuring points, including their name and number;
- overlaat.gen and overlaat.asc: x and y coordinates of weirs including weir number, type, x coord, y coord, crown elevation, left elevation and right elevation;
- rivieras.gen: x and y coordinates river axis;
- rivkmp.gen, rivkmp.asc, rivkml.gen and rivkml.asc: x and y coordinates of river kilometres points including point number and point kilometres, x and y coordinates river kilometre lines including line number and line kilometres;
- rrb.gen: x and y coordinates area delineation;
- ruwlijn.gen and ruwlijn.asc: x and y coordinates of roughness lines, including line number and roughness element code;

- ruwvlak-u.asc and ruwvlak-v.asc: m coordinate, n coordinate, roughness element code and fraction of roughness elements per u area and per v area, respectively, of a WAQUA computation grid;
- shwvbw\_l.gen: x and y coordinates high-water-free areas;
- uitvloc.gen and uitvloc.asc: x and y coordinates of output locations , including their name and number;
- waterh.asc: m coordinates, n coordinates and water level.

### 3.4 Use of the Database

In order to make the Baseline database manageable and to avoid files being accidentally thrown away or incorrect amendments being made to files, the user rights allocated to all the different users vary for each of the components of the database. The database administrator allocates these user rights. User rights may be: reading, writing and implementation. Reading is taken to understand consultation, selection and drawing of files and the copying of files from the directory in question. Writing is the amendment and removal of files, as well as the relocation of files to or from the directory in question and the copying of files to the directory in question. Implementation is the implementation of programmes.

The database administrator may read, write and implement all components of the database. Database users have more limited rights. A user has certain rights as an individual user but may also be a member of a user group with more extensive rights.

Individual users may only read in the main BASISGEG, VARIANT, BEHEER and SYSTEEM directories. Users cannot edit and remove these files, nor add any files to these main directories. An exception to this rule is the IMPORT directory in the BEHEER main directory, to which users may copy files. After all, this directory is intended for control of those user files which are eligible for inclusion as a basic file or variant by the administrator. A user can view files in the main directories given above, can select data from these files and can draw the files. Users can also copy the files from these main directories to their own user directory where they may write (see below). If a user wishes to edit files therefore, when calculating the effects of permits for example, the user must first copy the required files from the main directories to his own user directory. A function has been developed in the application for copying individual files or groups of files (see chapter 4).

Each user has his own user directory (home directory). The user has all possible rights in this directory. These user directories are the workstations for the users. When a user wishes to work with the database, he must begin by copying all the required basic files, variants or project files to this directory. When copying basic files, variants or project files, the user can also indicate an area of interest, for example a section of the Meuse or a floodplain (see chapter 4). This removes the need to work with very large and therefore very tardy files relating to a complete river branch. We therefore recommend users to always define an area of interest and to copy that spatial element of the required files to the user directory, even when only viewing, selecting or drawing files. When the user wishes to make a user file, for example a modified file with summer dikes, eligible for use in a basic file or variant, the user can offer this file for control by the administrator, by copying it to the BEHEER/IMPORT directory.

Besides individual users with their own user directory, we also distinguish between user groups. User groups are users who work jointly on a project or who make frequent use of the same files (for example a cross section of a floodplain or files with implemented permits). The administrator allocates the users to one or more user groups and allocates rights to each of the user groups. The joint data of user groups is stored in the database in the PROJECT main directory. The administrator makes a separate project directory for each project in this main directory. All users can read these project directories. Only the project group involved in the project in question can also write in the project directory. All users in the user group can change the project files, copy files to the project directory, remove files, etc. When a number of users work with the same files, for example the same sub-area, one of the users need only define the sub-area once and copy the required files from the sub-area to the project directory. Users can also exchange files and make use of each others' editing or results by

saving files in this project directory. Finally, the administrator can keep simple control of all the files belonging to a project and can make back-ups.

## 4 Baseline Functions

Using the Baseline application, a user can manage, view, select, change and present the data stored in the Baseline database. The Baseline function also includes various tools for generation of derived data from the basic data, such as weirs and elevation models for the calculation of flow models, etc.

Baseline also has a function for the creation of WAQUA and SOBEK input files. In order to provide for the exchange between various Public Works Departments and third parties and in the exchange with other file formats, import and export functions of files have been included.

Version 3.3 of Baseline includes the following groups of functions, in order of working:

- Navigation and Management
- Consultation and selection
- Panning and Zooming
- Modifying
- Tools: for the generation of various derived files for flow models
- Models: for the creation of WAQUA and SOBEK input files
- Importing and Exporting
- Presentation
- Closing Baseline

The possibilities offered by the functions are described in the following paragraphs. The following chapters will deal with their effect in detail.

### 4.1 Navigation and Management

The functions for navigation and management enable the user and administrator of Baseline to move the database structure in order to copy, move and remove files and directories, and to add new directory structures to the database.

The following functions are available:

- Navigate to user/project
- Copy:
  - Directory
  - Workspace
  - Geo data set
  - Coverage
  - Grid
  - Tin
  - File
- Renaming/Moving Coverage:
  - Directory
  - Workspace
  - Geo data set
  - Coverage
  - Grid
  - Tin
  - File
- Clipping:
  - Workspaces from a directory
  - Single workspace
  - Geo data set
  - Coverage
  - Grid
- Erase:
  - Workspaces from a directory

Single workspace  
Geo data set      Coverage

- Delete:  
    Directory  
    Workspace  
    Geo data set      Coverage  
    Grid  
    Tin

File

- Conversion:  
    Covrages with lines and points

- Add:  
    Area  
    Project  
    Variant  
    Basic file  
    Workspace

WAQUA grid

WAQUA schematization

SOBEK computation grid

SOBEK schematization

The **navigate to user/project** function enables the user to set a default user or project directory, one off, for the duration of a session. This default directory is then used for all further selections of files and choices of workspaces where amendments and such are stored.

The user can use the **copy** function to copy directories, entire workspaces (including all files in these workspaces), geo data sets (coverages, grids and tins) and files to his own user directory or a project directory in the PROJECT main directory for which the user has been allocated writing rights. A copy procedure to the own user directory or project directory must first be carried out before the user can edit files.

The **rename/move** function can be used to rename directories, entire workspaces (including all files in these workspaces), geo data sets (coverages, grids and tins), or to move them elsewhere in the directory structure. Because these are writing activities, these functions only work for the user's own user directory, the project directories under the PROJECT main directory for which the user has been allocated writing rights, and from such a directory to the BEHEER/IMPORT directory. This function is particularly useful for example when moving an entire workspace with project files to the administrator for control or the movement of user files to projects.

The **clip** function can be used to make a spatial cross section of entire workspaces (including all files and underlying workspaces and directories in these workspaces) and geo data sets (coverages and grids). This allows for the selection of an area of interest from a basic file, for example a floodplain or part of a river branch such as the Border Meuse, for storage as a new file.

The **erase** function can be used to remove spatial cross sections of entire workspaces (including all files and underlying workspaces and directories in these workspaces) and geo data sets (coverages). This allows for the selection and removal of data in an area of interest from a basic file, for example a floodplain or part of a river branch, for storage as a new file.

The **remove** function is for the removal of directories, entire workspaces (including all files in these workspaces), geo data sets (coverages, grids and tins) and files from the database. The user can only remove workspaces, directories, coverages and files from his own user directory and the project directories under the PROJECT main directory for which the user has been allocated writing rights. Users are therefore not authorised to delete any basic files and variants.

The **conversion** function can be used to convert point/line coverages from the previous data structure to the new data structure. The conversion relates to the “parameters search radius” and “more points in the same location” and has consequences for the weir coverages settlement in the conversion to WAQUA. This means that the changed data structure of line/point coverages asked for a change in BASWAQ. The schematizations according to the previous data structure can still be used in Baseline 3.3. This User Manual will give more information about conversion later on.

The **add** function is used for the creation of new project directories, new variant directories, new area directories and new basic file directories, including the underlying classification in workspaces. Individual workspaces can also be created and directory structures can be added for WAQUA grids, WAQUA schematizations, SOBEK computation grids and SOBEK schematizations. The user can only remove create new directory structures and workspaces in his own user directory and the project directories in the PROJECT main directory for which the user has been allocated writing rights. The user is not authorised to create directories for new variants and basic files (writing rights).

## 4.2 Consultation and selection

The consultation and selection functions can be used to view and select all data in the Baseline database. Both the spatial location of elements and the information on the elements can be viewed. Elements can also be selected both spatially and on the basis of the attributes (information). The following functions are available:

- Drawing: edit coverage, background coverages, topographic files, TINs and attribute texts.
- Selecting: both spatial and logical selections on the basis of the attributes (information)
- Attributes: display of attribute data (information) of selected elements.
- Save Selection
- Create Contour:
  - Box
  - Polygon

Users can use the **draw** function to draw any file in the database on the screen. In doing so, the file in question is defined as an edit coverage. Furthermore, a number of files (basic files) and topographic files (digital river map, files of the Topografische Dienst (Dutch Ordnance Survey)) can be drawn as background coverages. The attribute texts relating to the elements can also be drawn. Other actions can be executed for this edit coverage, such as selections. The user must begin by at least drawing an edit coverage before other functions can be used in this group.

The **select** function can be used to make selections in the drawn edit coverage. Both spatial selection and logical selection is possible. Spatial selection of elements is possible by clicking one or more elements with the mouse on the screen or selecting all elements within a box (rectangle) drawn with the mouse. Alternatively, all elements within a certain sub-area can be selected, by indicating a coverage with an area limitation. In the case of logical selection, the user can make selections on the basis of attribute values (information) of the elements in the edit coverage drawn on the screen, such as a selection of all dikes higher than 10 metres.

Using the **attributes** function for representation of attribute data (information), the user can request the information stored on elements in the database, from the drawn edit coverage. The elements in which the user is interested, can be selected using the following function.

The **save selection** function can be used to save selections of the edit coverage in a new coverage to be indicated by the user.

Use the **create contour** function to save a drawn box (rectangle), which, for example, indicates the limits of an area of interest, as a coverage.

### 4.3 Panning and Zooming

The pan and zoom functions can be used to zoom the files which are drawn using the draw function from the consultation and selection function group.

The following functions can be used:

- Zoom edit coverage: display complete edit coverage
- Zoom in: zoom in on a centre to be indicated using the mouse
- Zoom out: zoom out on a centre to be indicated using the mouse
- Pan: Shift the drawn files in relation to a centre to be indicated with the mouse
- Zoom rectangle: zoom in on a rectangle to be indicated using the mouse
- Zoom selection: zoom in/out on all selected parts of the working coverage
- Zoom scale: zoom in/out to a certain scale designated by the user
- Identification of a selected element (request information)

### 4.4 Modifying

The modify function is used to make changes in the database files. These may be spatial changes such as the addition or removal of elements, the change of attribute texts of elements or the change of ASCII files. Coverages with changes can be input in a file from the database.

The following functions are available:

- Drawing
- Spatial
- Attributes
- ASCII file
- Inserting update files
- Inserting files
- Saving

The **draw** function is used to draw an edit coverage (the file in which changes are to be made), background coverages and topographic files on the screen. This function includes the same activities as in the draw function in the consultation and selection function group.

The **spatial** function can be used to make spatial changes in the edit coverage. The user can add, move, copy and remove elements (polygons, lines or points). In the basic file group in the hooglijn workspace (kade, krib, hverschil, overlaat, bandijk, breukl and breuklplas), the lines and their points with elevation data can be jointly collected.

The **attributes** function can be used to modify the attribute texts of selected elements. The user can enter or calculate new values.

Using the **ASCII file** function, ASCII files can be modified using a text editor.

The **insert file** function is used to add spatial data by inserting one or more files with new data into the database files.

For coverages with lines and/or points, this means that lines and/or points are added to the existing situation. In polygon coverages, the overlapping parts are replaced by polygons from the file to be inserted and the non-overlapping parts are added to the original file.

The **insert update file** function is used to make spatial changes by inserting one or more files with modifications into the database files.

For coverages with lines and/or points, this means that new lines and/or points replace the existing ones if these are within the set margin. In polygon coverages, the overlapping parts are replaced by

polygons from the update file to be inserted and the non-overlapping parts are added to the original file.

An example of the use of this function is the input of a file with new summer dikes to be constructed in the Meuse floodplain, in the file with Meuse summer dikes. The database administrator can also use this function for the annual update of the basic files by inputting files with permits allocated and already implemented, into the basic files.

The **save** function is used to store modifications in the meantime.

## 4.5 Tools

This group of functions contains a number of functions for generation of derived files from the database files, which are required for execution of calculations using WAQUA and/or SOBEK. With the aid of these tools, the derived files can be continually re-compiled, when the basic files are updated or the effects of certain permits are calculated on. The following functions are available:

- Create elevation model:
  - Create elevation model v3.3
  - Create elevation model v3.0
- Create weirs
- Create sections
- SOBEK files:
  - Create compartments:
    - Main channel compartments
    - Floodplain compartments
  - Elevation statistics:
    - Main section
    - Bank section
    - Floodplain
  - Discharge Density Grid
  - Flow conveyance and retention:
    - Flow Conveyance Classes
    - Flow conveyance and retention
  - Create summer dikes:
    - Weir grid
    - Summer dike segments
    - Areas behind summer dikes
  - SOBEK roughness
  - Create BOS tables
- Roughness elements:
  - Cluster ecotopes
  - Generate roughness areas:
    - polygon file
    - line file
- Create water level model
- Convert Rgf file

The **create elevation model** function can be used to make an elevation model of an area of interest, on the basis of files containing main channel, floodplain, bank and lake elevation data, elevation boundary lines, fault lines and primary dike data. The limit given may be the border of the area of interest or the border of the floodplain. The TIN function of ArcInfo is used to generate the elevation model. The Baseline version 3.3 has an improved function for TIN creation. Line and point coverages (fault lines, primary dikes and elevation boundary lines) are converted to 3D ungenerate files and are offered to the CREATETIN routine, instead of being offered separately as line and point coverage.

The **create weirs** function is used to create a weir file from files with summer dikes, groynes and elevation boundary lines designated by the user. All the summer dikes and groynes are included when creating the weir file. In the case of elevation boundary lines, only those lines are included whereby the elevation boundary line is higher than or equal to 0.5 metres and the slope is greater than 1 in 6 (weir attribute =1).

The **create sections** function is used to make a file with sections (main section/main channel, groyne section/bank section, floodplain section) from files containing normal lines, bank lines and border of the floodplain.

The **SOBEK files** function is used to create a number of basic files required for SOBEK. These are the main channel and floodplain compartments, flow conveyance/retention, summer dike segments, weir grid, roughness elements, etc. DSS tables can also be created and various statistics can be calculated.

The **roughness** function can be used to create a file with so-called roughness areas. Roughness elements are taken to mean spatial (growth) units which exercise a certain resistance on the flow. The units are formed on the basis of the ecotope files of the Meetkundige Dienst (Dutch Survey Department), supplemented with a number of basic files derived from the digital river map and a number of user files. A roughness element is characterised by a code which is subsequently converted into k values in WAQUA. The **cluster ecotopes** function is used to cluster ecotopes (polygons) from the ecotope maps of the Survey Department into generalised units, according to a translation key for translation of the ecotope codes into codes for the roughness elements. The **generate roughness areas** function can then be used to create a polygon file and a line file with roughness areas. In generating the polygon file with roughness areas, the user can indicate files with lines of trees, buildings, lakes, groynes, main channel, special ecotopes, special k values, fixed layers, villages and high-water-free areas. The polygons in these files are added to the clustered ecotopes file in a certain sequence, whereby these polygons replace the areas in the clustered ecotopes file. In generating the line file with roughness areas, files with hedgerows and wooded banks designated by the user are combined to form a new line file.

The **create water level model** function can be used to create a water level model of an area of interest, on the basis of a point coverage with water levels and ASCII files with water-free areas and 'dry lines' (line elements where no water flows). The limit given may be the border of the area of interest or the border of the floodplain. The TIN function of ArcInfo is used to generate the water level model.

The **convert Rgf file** function is used to convert an ASCII file with a WAQUA computation grid into a point coverage with bed points, a point coverage with water level points, a line coverage with grid lines and three polygon coverages with grid polygons.

## 4.6 Models

This group of functions contains functions for conversion of files from Baseline to WAQUA and SOBEK input files. The following functions are available:

- WAQUA conversion:
  - to WAQUA:
    - to WAQUA 3.3
    - to WAQUA 3.0
  - from WAQUA (not yet implemented)
- SOBEK conversion
- SOBEK profiles

The **conversion to WAQUA** function is used to convert Baseline files into input files for BASWAQ. BASWAQ is a Fortran program which then renders the files ready for input in WAQUA. BASWAQ is then automatically started. Part of the implementation of BASWAQ is then finally converted back into coverages for control of the results of the conversion with the aid of Baseline.

The **SOBEK conversion** function can be used to grid Baseline files for input into SOBEK. The following files can be grid: sections, SOBEK compartments, SOBEK summer dikes, SOBEK lakes, flow conveyance, left and right banks and elevation model.

The **SOBEK profiles** function is used to generate SOBEK profiles.

## 4.7 Import/Export

This function allows for exchange of files between various Public Works Departments or with third parties. Furthermore, files with other commonly used file formats can be generated from the database and imported into the database.

The following functions are available:

- ArcInfo (e00):
  - import
  - export
- ASCII:
  - import
  - export
- DXF:
  - import
  - export

The function for import/export of **ArcInfo** e00 files can be used to export the ArcInfo coverages from the database, after which they can be exchanged with other departments or third parties. Coverages supplied by third parties can also be imported into the database using this function.

The function for import/export to and from **ASCII** format allows the user to import ASCII files supplied by third parties into the database and export coverages from the database. The ASCII files to be imported must be compiled in a special manner. Refer to the Baseline 3.0 Basic File Protocol (CSO & ESRI, report number 98.624, 1998) for a technical description of the ASCII files to be imported. This protocol also describes the composition of the ASCII export files.

The function for import/export to and from **DXF** format is used to export AutoCAD DXF files from the database and into the database. On importing DXF files, the user can indicate which layers of the AutoCAD file should be imported.

## 4.8 Presentation

The presentation function allows the user to display simple maps on the screen, to have them plotted and to save them as a plot file. This function is particularly intended for the creation of simple maps in order to check implemented changes and such. The function is not an extensive tool for the creation of all kinds of GIS maps and is therefore somewhat limited in the user options. We therefore recommend that a GIS specialist is consulted for the creation of maps for presentations, final reports, etc. The following functions are available:

- Settings
- Drawing
- Plotting:
  - plotter
  - plot file

The **settings** function can be used to indicate the settings for maps to be made. An indication can be given of which files from the database should be drawn. The user determines for himself which symbols and colours are to be used. He can also indicate which topographic files or map layers are drawn as a background file. Standard symbol sets are used for this purpose. Other possible settings are the format and the orientation of the map, as well as the scale of the map and a title and subtitle. A key to symbols, date, North arrow, scale and logo are generated according to a standard layout.

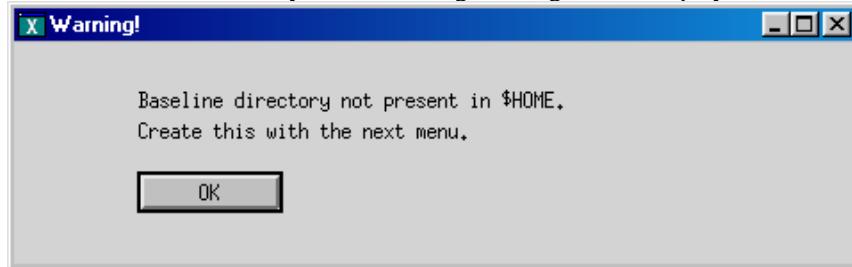
The **plot** function can be used to plot the maps drawn on the screen using the settings function or to save them as a plot file. When plotting, the user can choose the plotter to which the map is sent. The plotters are automatically selected, which are suitable for the chosen map format. When saving the plot file, the user can choose between postscript and rtl format files.

## 4.9 Closing

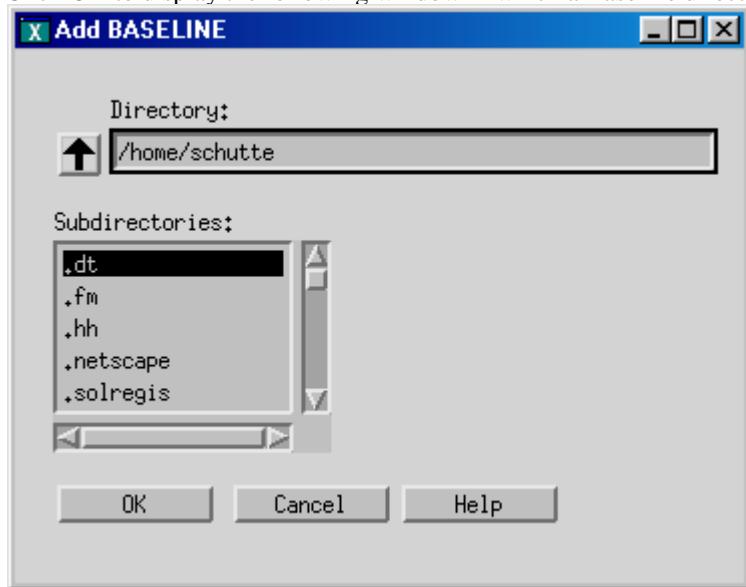
The user uses the close function to either exit the application or to be temporarily prompted for actions in ArcEdit.

## 5 Baseline StartUp

Windows NT users can start the Baseline application by clicking on the Baseline icon (with a shortcut to baseline.bat). UNIX users must type Baseline behind the UNIX prompt to start the application. Both ArcInfo and the application are started. Only users with the proper authorisation from the administrator may use Baseline. If Baseline is run for the first time, a Baseline directory has to be created in the user directory. The following warning will be displayed if there is no Baseline directory:



Click OK to display the following window in which a Baseline directory can be created:



### Add BASELINE

=====  
Use this function to add "Baseline" to a directory structure.  
The directory can only be added to the user's home directory.

Directory: By default, this is the user's home directory.

Subdirectories: Available directories in the current directory.

OK: If possible, the "Baseline" directory is created.

Cancel: The "Baseline" directory is not added.

Help: This screen.

## 5.1 Screen Settings

### 5.1.1 Introduction

The size of the Baseline windows may sometimes be incorrect, generally too large. The settings below may prevent this.

From the ArcInfo help file:

**“ARCINFOFONTNAME <font name>**

Sets the font type used in form menus. If not set, the system default will be used. Pulldown and sidebar menus are not effected by this and the ARCINFOFONTSIZE variables; they always use the system default.

Fixed width fonts are recommended when setting this variable. An example of a fixed width font would be 'Courier' or 'Courier New'. Proportional fonts tend to cause misalignment of text.

**ARCINFOFONTSIZE <value>**

Sets the font size used in form menus. If not set, the system default will be used. Pulldown and sidebar menus are not affected by this and the ARCINFOFONTNAME variables always use the system default.

The font size is based on screen resolution as shown in the table below.

Screen Resolution (pixels)	Font Size
1024 x 768	8
1152 x 882	8
1280 x 1024	10
1600 x 1200	10

If your system screen size is 1024x768 in pixel size, font size of 8 (or less) is recommended when using this variable.”

### 5.1.2 Openwindows Settings (Solaris)

Copy the UNIX \$ARCHOME/Xenv/xinitrc settings to \$HOME/.xinitrc . Also copy the ArcInfo file from the same directory to the user's root directory. The ArcInfo file supplied with Baseline does not have the correct settings for all platforms.

### 5.1.3 CDE Settings

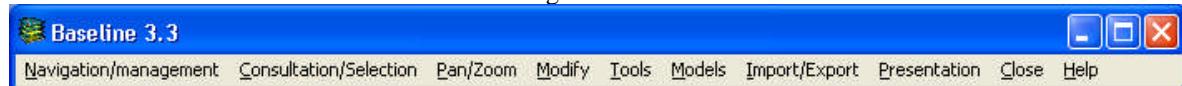
- dtterm: font size 9.5;
- style manager: font size XXSmall(1).

## 6 Baseline Menu

The Baseline main menu bar contains nine function-specific menus and a general Help menu. The help function gives a short description of the items in each menu. The following chapters describe the separate menu items. To begin with, the available menu items are summarised. The operation of the functions and the menus are then described on the basis of the corresponding screendumps. This description is similar to the online help which can be opened by clicking the Help buttons in the application.

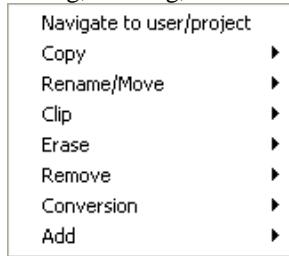
Click a menu item to open the menu item's selection window. Most functions can then be enabled immediately. A number of functions is grouped in a submenu. The presence of such submenus is indicated by an arrow on the right-hand side. Click a submenu to open a selection window in which the corresponding functions can be selected.

The Baseline main menu bar contains the following menus:



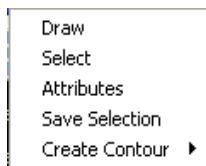
### 1. Navigation/management

Navigating the system and performing file management: copying, renaming, clipping, erasing, moving, deleting, converting and adding workspaces, directories, coverages and files.



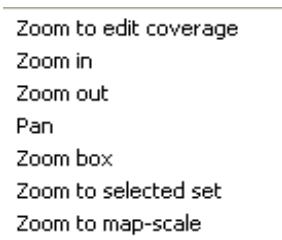
### 2. Consultation/Selection

Viewing files and making selections in these files.



### 3. Pan/Zoom

Functions to navigate the Graphical User Interface: zooming, panning.



4. Modify

Modifying basic data and copied variants or changing attribute information.

Draw  
Spatial  
Attributes  
ASCII-file  
Insert update file  
Insert file  
Save

5. Tools

Functions for the creation of (water level) elevation models (TIN), weirs, sections, roughness areas, SOBEK basic files and for the conversion of WAQUA grids.

Create elevation model ►  
Create weirs  
Create river sections  
Data SOBEK ►  
Roughness ►  
Create waterlevel model  
Convert RGF-file

6. Models

Creating WAQUA and SOBEK input files and SOBEK profiles.

Data conversion for WAQUA ►  
Data conversion for SOBEK  
SOBEK profiles

7. Import/Export

Data exchange functions for external sources and targets:  
ArcInfo, ASCII and DXF.

ARC/INFO ►  
ASCII ►  
DXF ►

8. Presentation

Presentation functions for intermediate and end results.

Settings  
Draw  
Plot ►

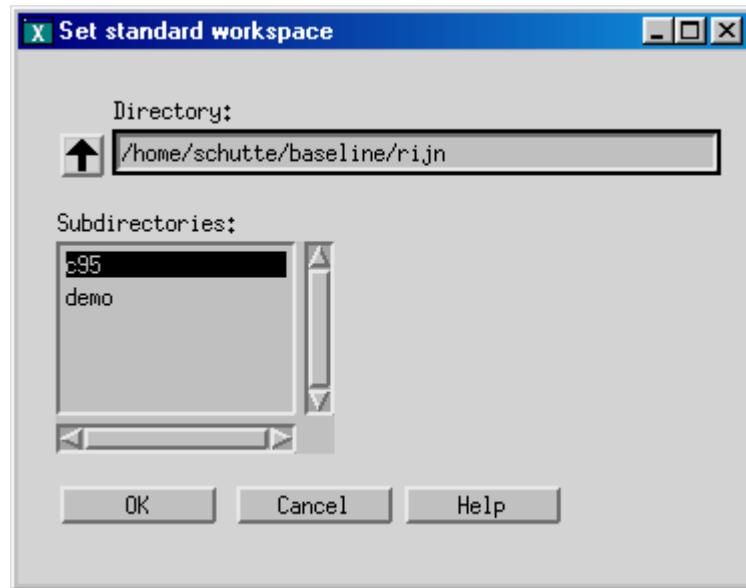
9. Close

Exiting the application and intermediate stage for ArcEdit session.

Close application  
Temporary to prompt:

## 7 Navigation/management

### 7.1 Navigate to user/project



#### Set standard workspace

Use the Navigate to user/project option to set the default user or project directory that will be used in this session.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

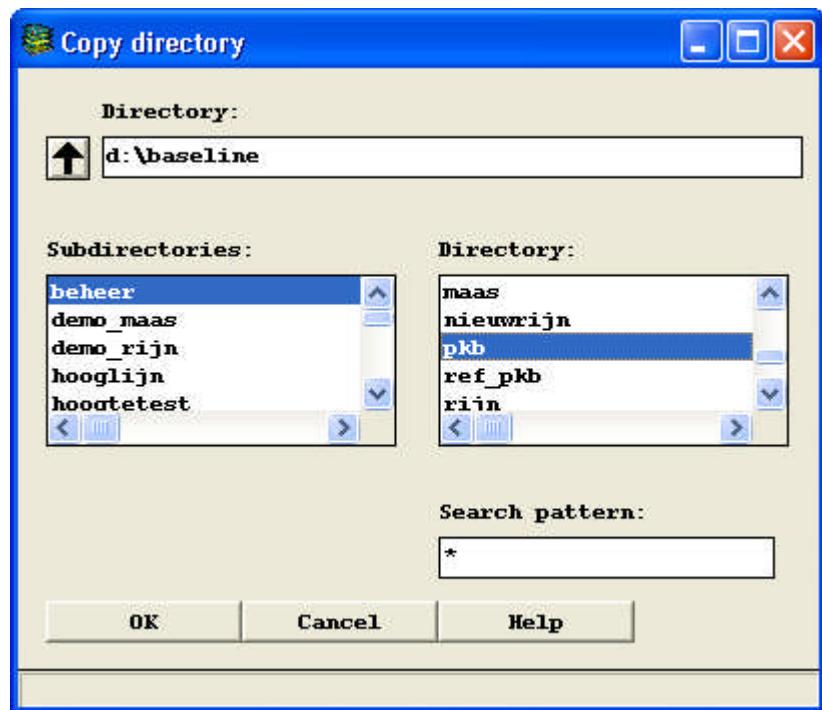
OK: Set selected workspace as default.

Cancel: Do not select a new workspace.

Help: This screen.

## 7.2 Copying

### 7.2.1 Copy directory



#### Copy directory

Use this function to copy an entire directory, including its subdirectories and any files in it, to another directory. It is primarily used to copy basic files, variants or projects to user directories. Users can then edit the coverages. Select the directory to be copied by means of the list boxes or by typing the directory path and name in the input field at the top of the list.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

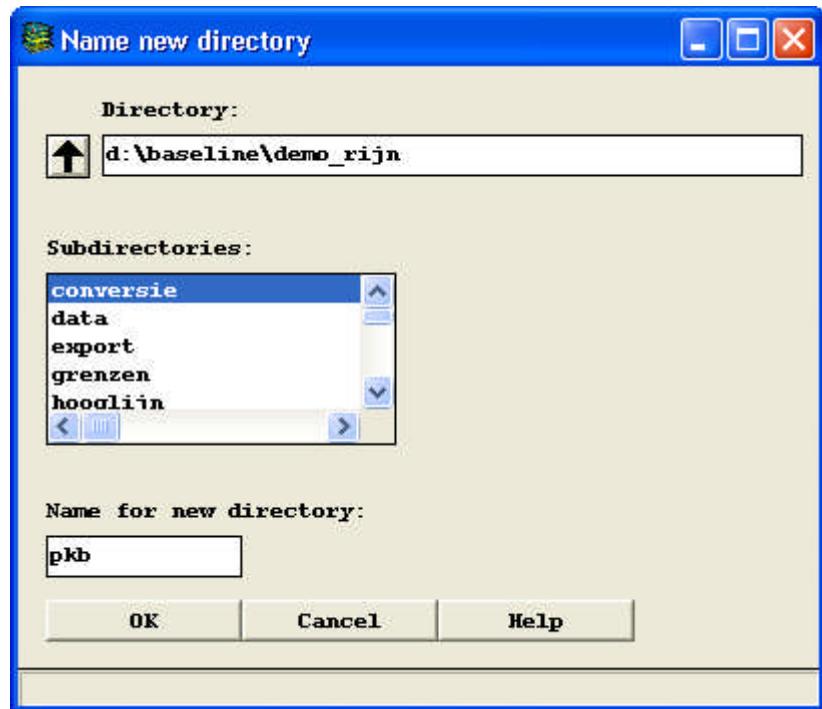
Directory: Available directories in the selected subdirectory.

Search pattern: Enter one or more letters to make a selection from the directories shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: After the selection, a window will be opened in which you can specify the new location of the directory.

Cancel: No directory will be copied.

Help: This screen.



#### Name new directory

---

Clicking OK in the previous screen will open this window.

Use this dialog box to indicate the target directory of the directory to be copied.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

#### Name for new directory:

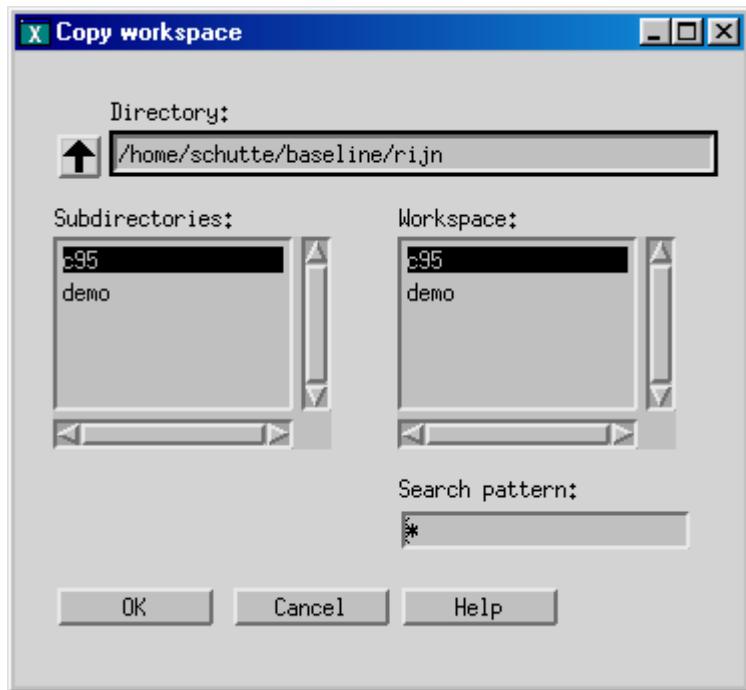
Enter a new name for the directory in this input field. Default is the same name.

OK: The selected directory is copied.

Cancel: Cancel copy operation and return to previous screen.

Help: This screen.

### 7.2.2 Copy workspace

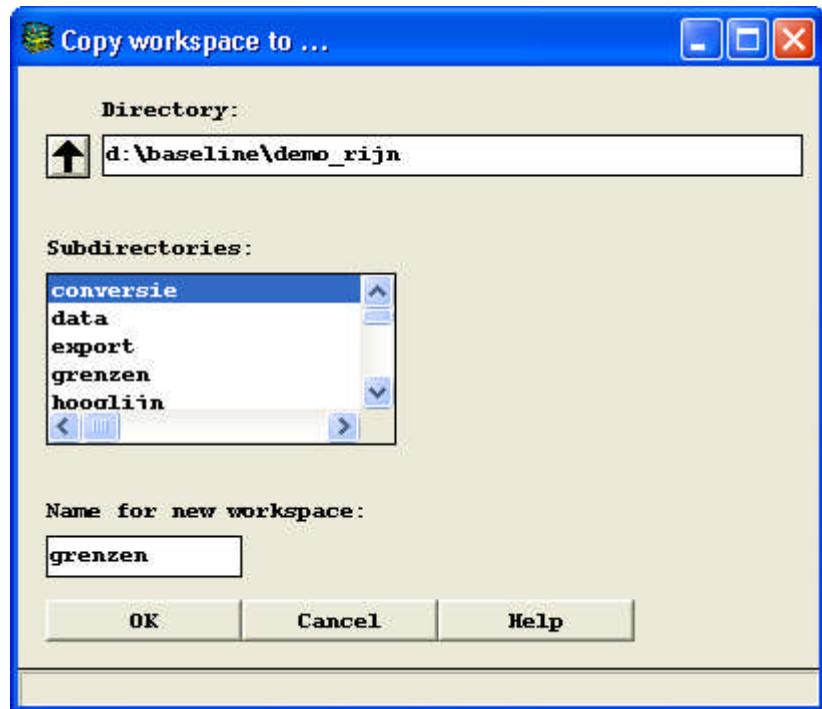


#### Copy workspace

Use this function to copy an entire workspace, including its subdirectories and any files in it, to another workspace. It is primarily used to copy basic files, variants or projects to user directories. Users can then edit the coverages.

Select the workspace to be copied by means of the list boxes or by typing the workspace path and name in the input field at the top of the list.

'Arrow Up':	Move up one directory.
Directory:	This input field shows the current path.
Subdirectories:	Summary of available subdirectories in current directory.
Workspaces:	Available workspaces in the selected subdirectory.
Search pattern:	Enter one or more letters to make a selection from the workspaces shown. Use the wildcard * to replace a number of unknown letters and ? to replace a single unknown letter.
OK:	After the selection, a window will be opened in which you can specify the new location of the workspace.
Cancel:	No workspace will be copied.
Help:	This screen.



### Copy workspace to ...

---

Clicking OK in the previous screen will open this window.

Use this dialog box to indicate the target directory of the workspace to be copied.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

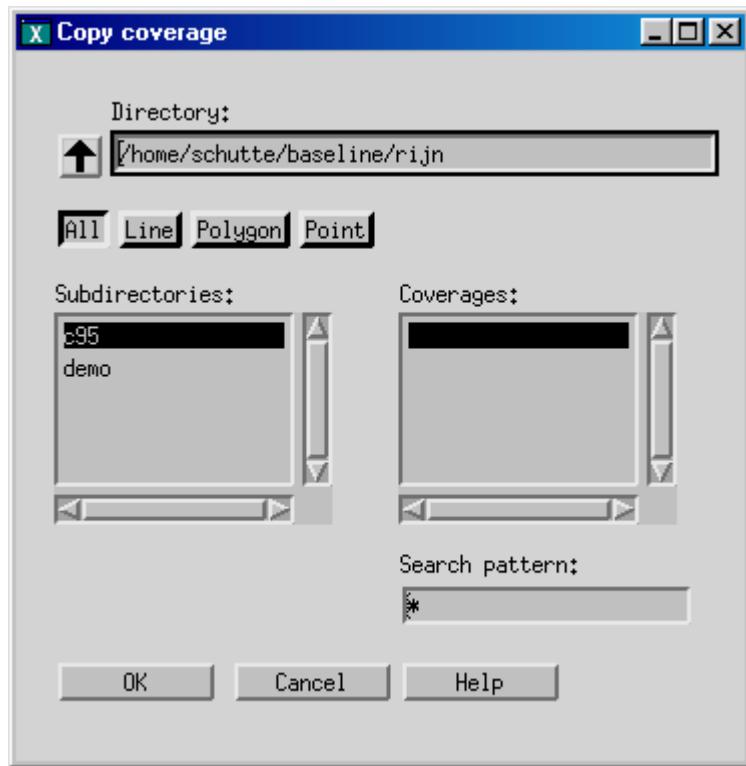
Name for new workspace: Enter a name for the new workspace in this input field.  
Default is the same name.

OK: The selected workspace is copied.

Cancel: Cancel copy operation and return to previous screen.

Help: This screen.

### 7.2.3 Copy geo data set: coverage



#### Copy coverage

Use this function to copy a coverage (ArcInfo file) from one workspace to another. It is primarily used to copy coverages from directories containing basic files, variants or projects to user directories. Users can then edit the coverages. Select the coverage to be copied by means of the list boxes or by typing the coverage path and name in the input field at the top of the list.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

All: Select all available coverages.

Line: Select line coverages only.

Polygon: Select polygon coverages only.

Point: Select point coverages only.

Subdirectories: Summary of available subdirectories in current directory.

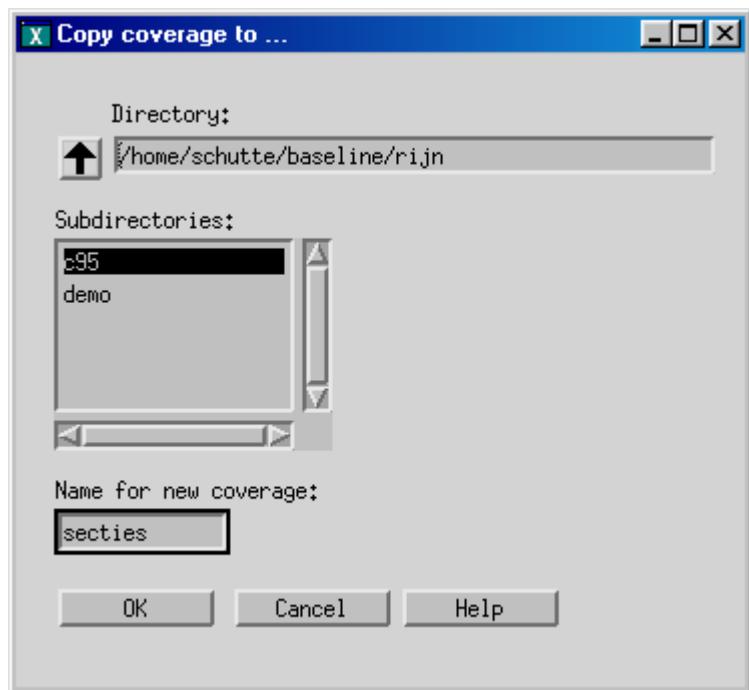
Coverages: Available coverages in the selected subdirectory.

Search pattern: Enter one or more letters to make a selection from the coverages shown.  
Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: After the selection, a window will be opened in which you can specify the new location of the coverage.

Cancel: No coverage will be copied.

Help: This screen.



### Copy coverage to ...

Select the target directory for the coverage to be copied and enter a name for the copied coverage in the input field. Default is the same name.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

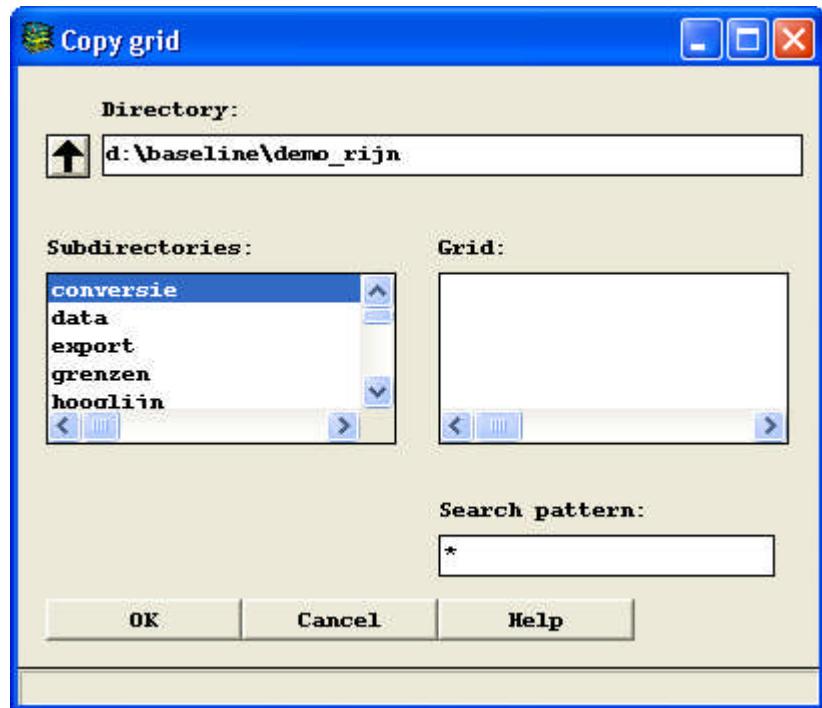
Name for new coverage: Enter the name of the copied coverage in this input field. Default is the same name.

OK: The selected coverage is copied.

Cancel: Cancel copy operation and return to previous screen.

Help: This screen.

### 7.2.1 Copy geo data set: Grid



#### Copy grid

Use this function to copy a grid (ArcInfo file) from one workspace to another. It is primarily used to copy grids from directories containing basic files, variants or projects to user directories. Users can then edit the grids. Select the tin to be copied by means of the list boxes or by typing the grid path and name in the input field at the top of the list.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

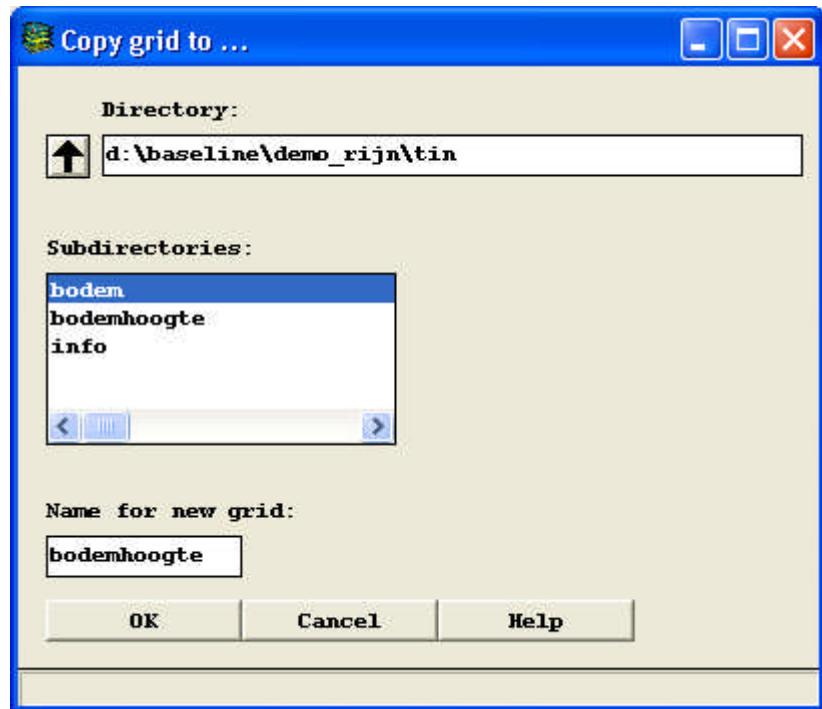
Grid: Available grids in the selected subdirectory.

Search pattern: Enter one or more letters to make a selection from the grids shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: After the selection, a window will be opened in which you can specify the new location of the grid.

Cancel: No grid will be copied.

Help: This screen.



#### Copy grid to ...

Select the target directory for the selected grid to be copied and enter a name for the copied grid in the input field. Default is the same name.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

Name for new grid:

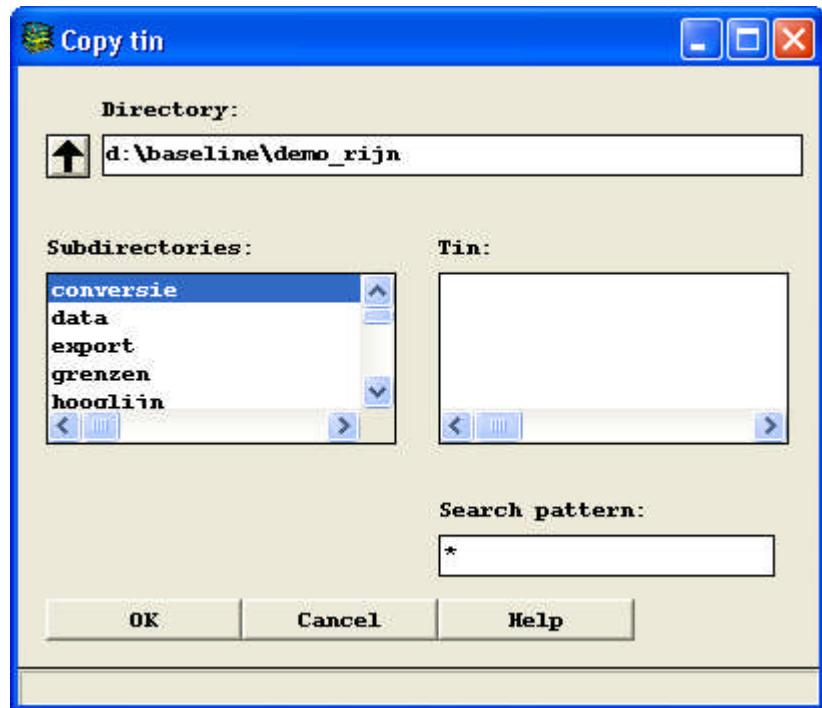
Enter the name of the copied grid in this input field. Default is the same name.

OK: The selected grid is copied.

Cancel: Cancel copy operation and return to previous screen.

Help: This screen.

### 7.2.2 Copy geo data set: Tin



#### Copy tin

Use this function to copy a tin (ArcInfo file) from one workspace to another. It is primarily used to copy tins from directories containing basic files, variants or projects to user directories. Users can then edit the tins. Select the tin to be copied by means of the list boxes or by typing the tin path and name in the input field at the top of the list.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

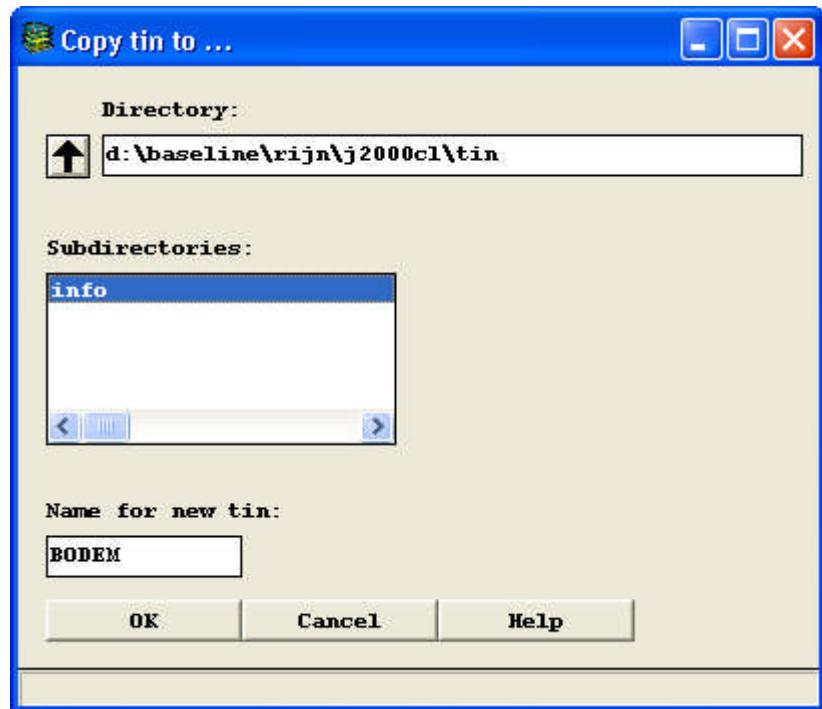
Tin: Available tins in the selected subdirectory.

Search pattern: Enter one or more letters to make a selection from the tins shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: After the selection, a window will be opened in which you can specify the new location of the tin.

Cancel: No tin will be copied.

Help: This screen.



#### Copy tin to ...

Select the target directory for the selected tin to be copied and enter a name for the copied tin in the input field. Default is the same name.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

New tin name:

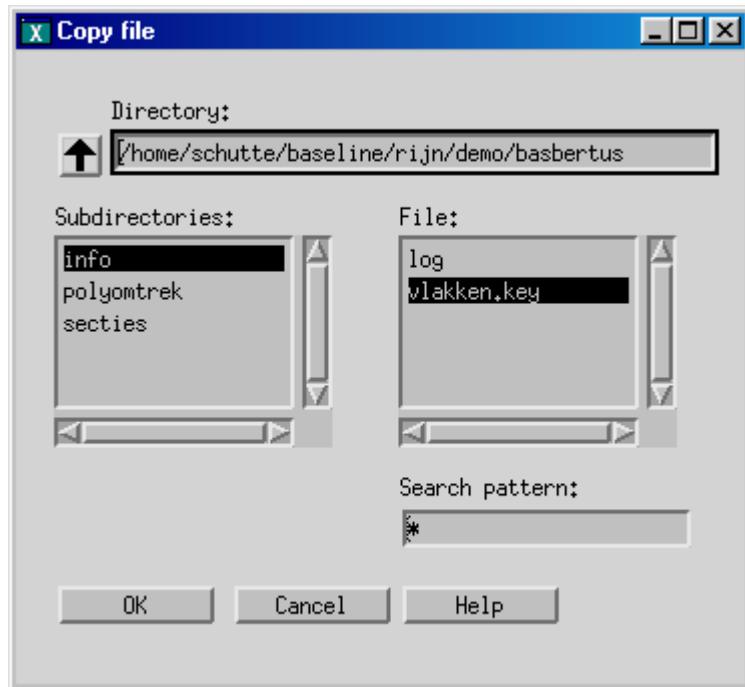
Enter the name of the copied tin in this input field. Default is the same name.

OK: The selected tin is copied.

Cancel: Cancel copy operation and return to previous screen.

Help: This screen.

### 7.2.3 Copy File



#### Copy file

Use this function to copy a file (for instance an ASCII file or an AutoCAD file) from one workspace to another. It is not possible to copy coverages (ArcInfo files). Coverages are copied using the 'Copy coverage' option. This function is primarily used to copy files from the directories containing basic files, variants or projects to user directories. Users can then edit the files or import them to Arc/INFO coverages. Select the file to be copied by means of the list boxes or by typing the file path and name in the input field at the top of the list.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

File: Available files in the selected subdirectory.

Search pattern: Enter one or more letters to make a selection from the files shown.  
Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: After the selection, a window will be opened in which you can indicate the new location of the file.

Cancel: No file will be copied.

Help: This screen.



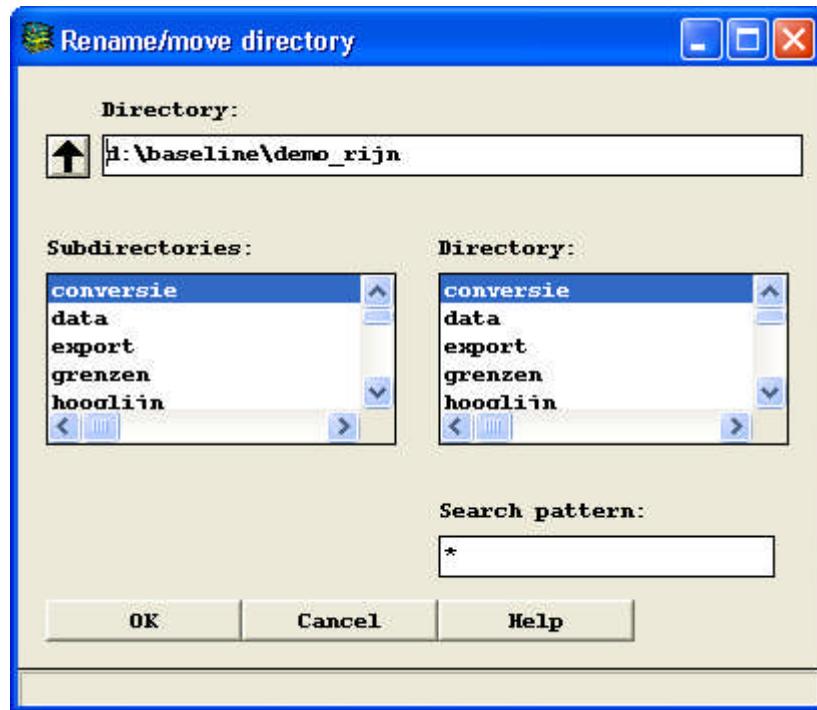
### Copy file to ...

Select the target directory for the selected file to be copied and enter a name for the copied file in the input field. Default is the same name.

'Arrow Up':	Move up one directory.
Directory:	This input field shows the current path.
Subdirectories:	Summary of available subdirectories in current directory.
Name for new file:	Enter the name of the copied file in this input field. Default is the same name.
OK:	The selected file is copied.
Cancel:	Cancel copy operation and return to previous screen.
Help:	This screen.

## 7.3 Renaming/Moving Coverage

### 7.3.1 Rename/move directory

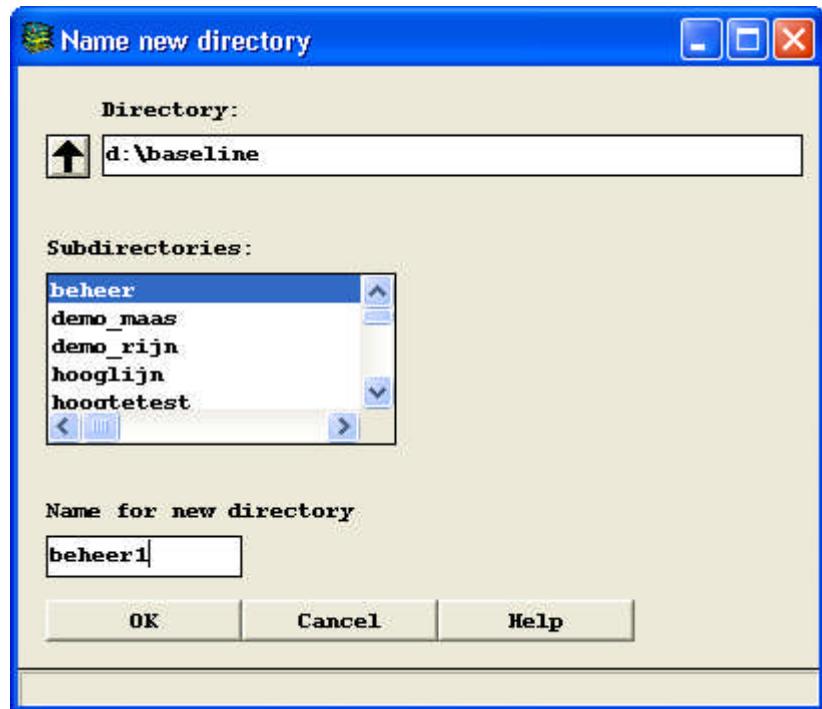


#### Rename/move directory

Use this function to rename or move an entire directory, including its subdirectories and any files contained in it. It is primarily used to rename user directories and to move user directories to project directories or vice versa.

Select the directory to be renamed/moved by means of the list boxes or by typing the directory path and name in the input field at the top of the list.

'Arrow Up':	Move up one directory.
Directory:	This input field shows the current path.
Subdirectories:	Summary of available subdirectories in current directory.
Directory:	Available directories in the selected subdirectory.
Search pattern:	Enter one or more letters to make a selection from the directories shown. Use the wildcard * to replace a number of unknown letters and ? to replace a single unknown letter.
OK:	After the selection, a window will be opened in which you can indicate the new location or the new name of the directory.
Cancel:	The directory is not renamed or moved.
Help:	This screen.



#### Name new directory

---

Name of the new directory after renaming or moving the directory.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory. Selecting a subdirectory will change the current path.

Name for new directory:

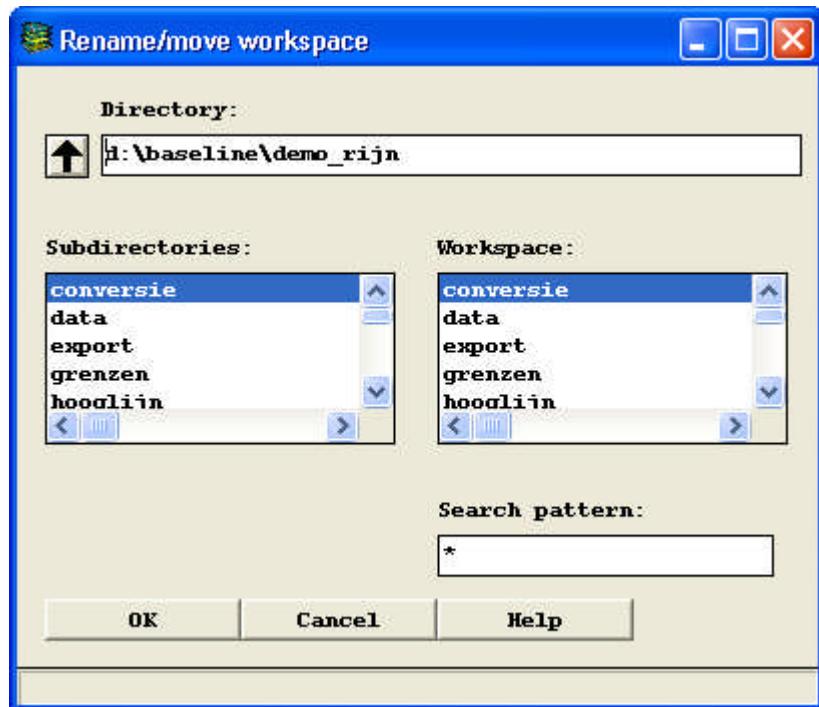
Enter a new name for the directory in this input field (in 'Directory'). Default is the same name.

OK: The selected directory is renamed or moved.

Cancel: Cancel rename/move operation and return to previous screen.

Help: This screen.

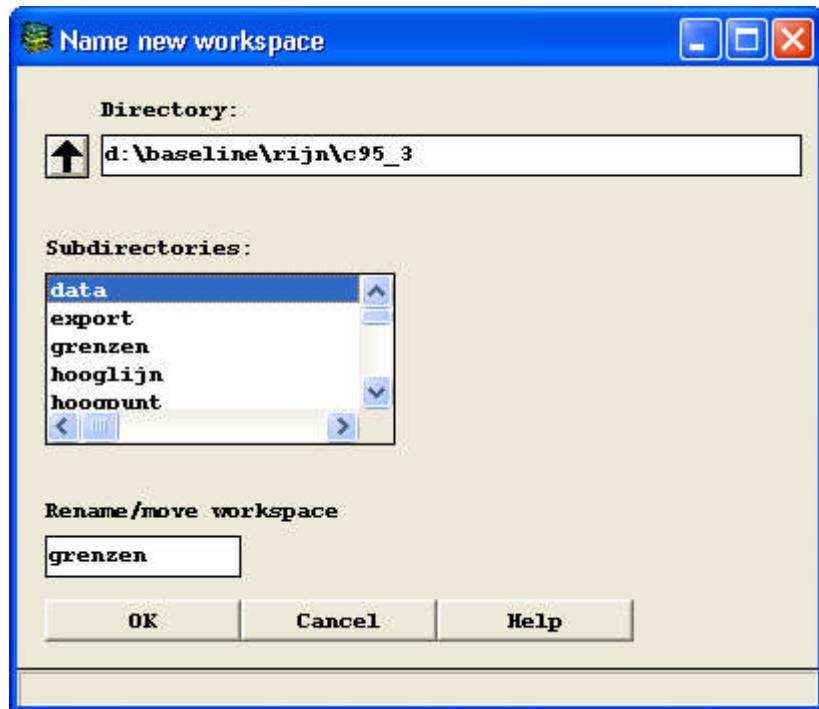
### 7.3.2 Rename/move workspace



#### Rename/move workspace

Use this function to rename or move an entire workspace, including its subdirectories and any files contained in it. It is primarily used to rename user directories and to move user directories to project directories or vice versa. Select the workspace to be renamed/moved by means of the list boxes or by typing the workspace path and name in the input field at the top of the list.

'Arrow Up':	Move up one directory.
Directory:	This input field shows the current path.
Subdirectories:	Summary of available subdirectories in current directory.
Workspace:	Available workspaces in the selected subdirectory.
Search pattern:	Enter one or more letters to make a selection from the workspaces shown. Use the wildcard * to replace a number of unknown letters and ? to replace a single unknown letter.
OK:	After the selection, a window will be opened in which you can indicate the new location or the new name of the workspace.
Cancel:	The workspace is not renamed or moved.
Help:	This screen.



#### Name new workspace

---

Name of the new workspace after renaming or moving the workspace.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory. Selecting a subdirectory will change the current path.

#### Rename/move workspace:

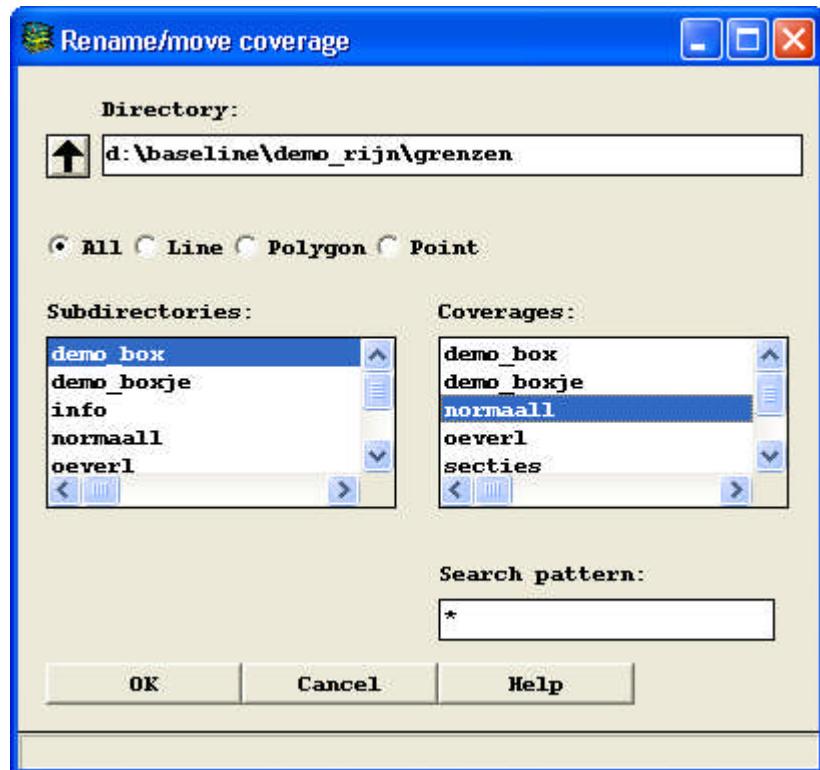
Enter a new name for the workspace in this input field (in 'Directory').  
Default is the same name.

OK: The selected workspace is renamed or moved.

Cancel: Cancel rename/move operation and return to previous screen.

Help: This screen.

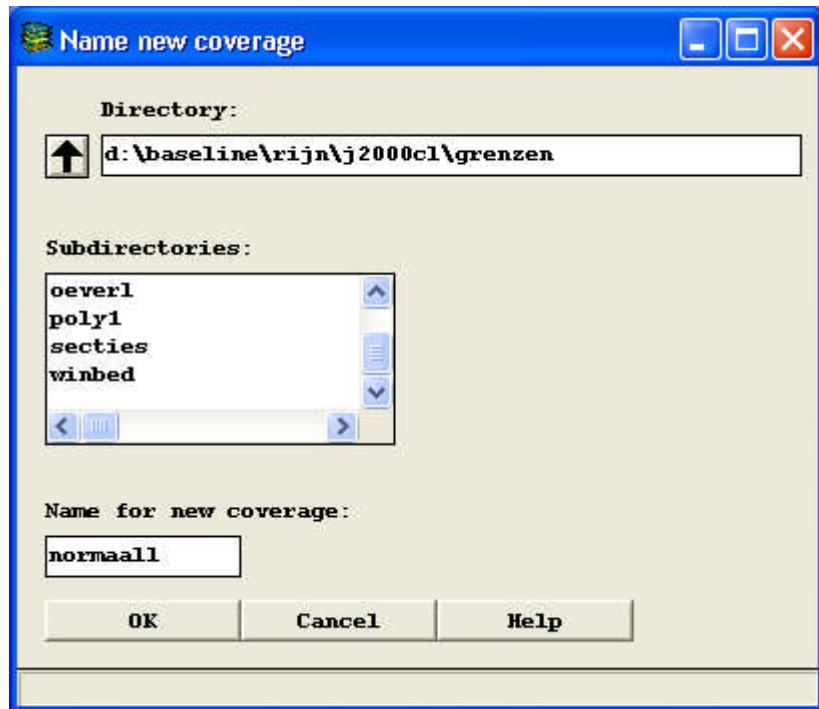
### 7.3.3 Renaming/Moving Geo data set: coverage



#### Rename/move coverage

Use this function to rename or move a coverage (ArcInfo file). It is primarily used to rename or move coverages from user directories and project directories. Select the coverage to be renamed/moved by means of the list boxes or by typing the coverage path and name in the input field at the top of the list.

'Arrow Up':	Move up one directory.
Directory:	This input field shows the current path.
All:	Select all available coverages.
Line:	Select line coverages only.
Polygon:	Select polygon coverages only.
Point:	Select point coverages only.
Subdirectories:	Summary of available subdirectories in current directory.
Coverages:	Available coverages in the selected subdirectory.
Search pattern:	Enter one or more letters to make a selection from the coverages shown. Use the wildcard * to replace a number of unknown letters and ? to replace a single unknown letter.
OK:	After the selection, a window will be opened in which you can indicate the new location or the new name of the coverage.
Cancel:	The coverage is not renamed or moved.
Help:	This screen.



#### Name new coverage

---

Name of the new coverage after renaming or moving the coverage.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory. Selecting a subdirectory will change the current path.

Name for new coverage:

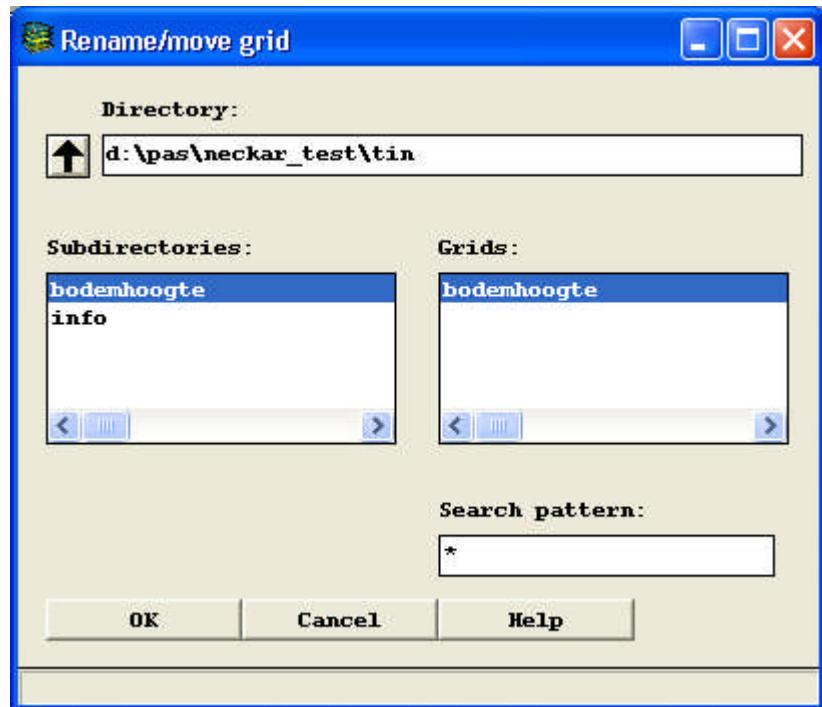
Enter a new name for the coverage (in 'Directory').  
Default is the same name.

OK: The selected coverage is renamed or moved.

Cancel: Cancel rename/move operation and return to previous screen.

Help: This screen.

### 7.3.4 Renaming/Moving Geo data set: Grid



#### Rename/move grid

Use this function to rename or move a grid (ArcInfo file). It is primarily used to rename or move grids from user directories and project directories. Select the grid to be renamed/moved by means of the list boxes or by typing the grid path and name in the input field at the top of the list.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

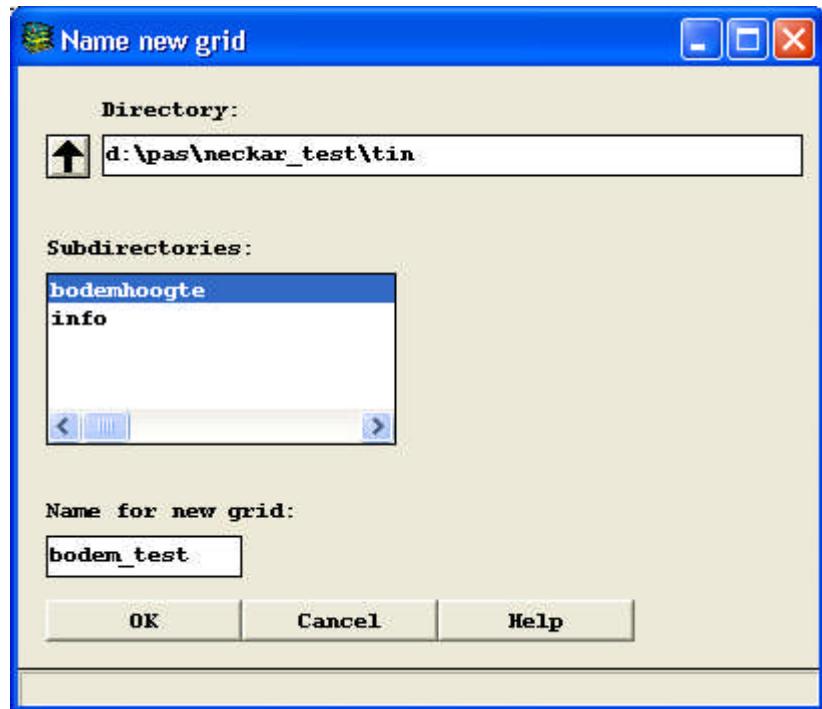
Grids: Available grids in the selected subdirectory.

Search pattern: Enter one or more letters to make a selection from the grids shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: After the selection, a window will be opened in which you can indicate the new location or the new name of the grid.

Cancel: The grid is not renamed or moved.

Help: This screen.



### Name new grid

---

Name of the new grid after renaming or moving the grid.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory. Selecting a subdirectory will change the current path.

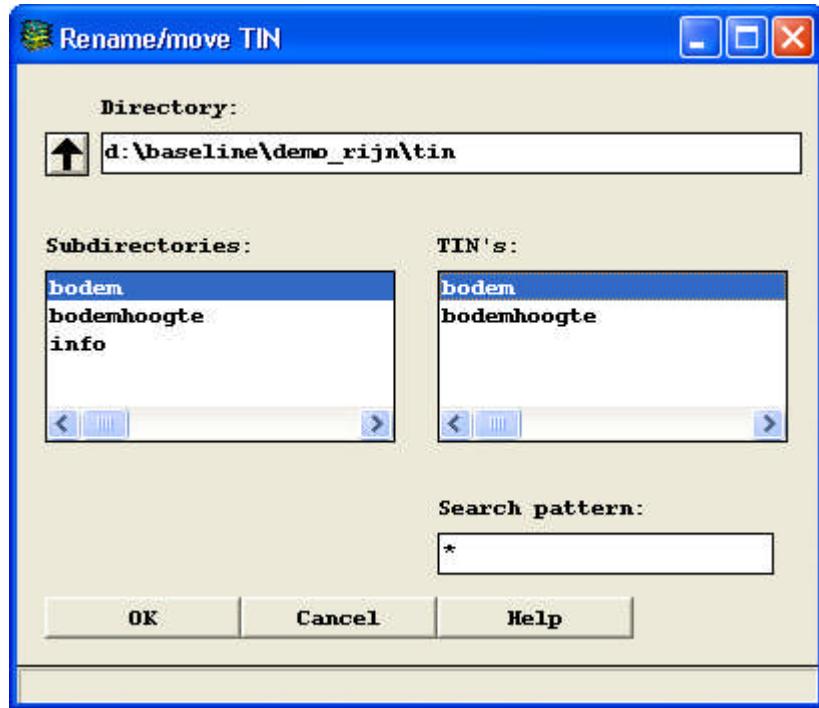
Name for new grid: Enter a new name for the grid in this input field (in 'Directory'). Default is the same name.

OK: The selected grid is renamed or moved.

Cancel: Cancel rename/move operation and return to previous screen.

Help: This screen.

### 7.3.5 Renaming/Moving Geo data set: Tin



#### Rename/move TIN

Use this function to rename or move a TIN (ArcInfo file). It is primarily used to rename or move TINs from user directories and project directories. Select the TIN to be renamed/moved by means of the list boxes or by typing the TIN path and name in the input field at the top of the list.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

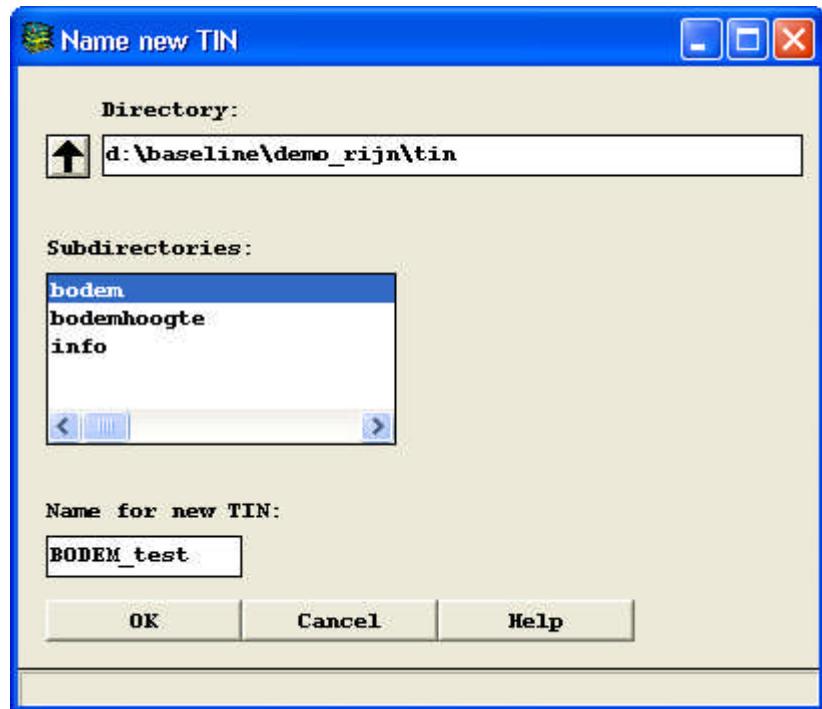
Tins: Available TINs in the selected subdirectory.

Search pattern: Enter one or more letters to make a selection from the TINs shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: After the selection, a window will be opened in which you can indicate the new location or the new name of the TIN.

Cancel: The TIN is not renamed or moved.

Help: This screen.



### Name new TIN

---

Name of the new TIN after renaming or moving the TIN.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory. Selecting a subdirectory will change the current path.

Name for new TIN:

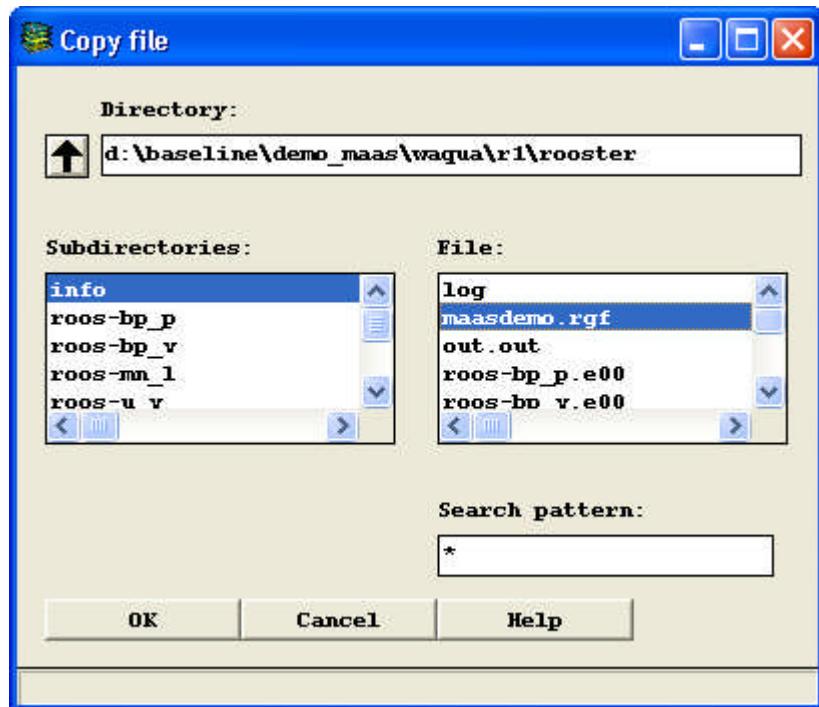
Enter a new name for the TIN in this input field (in 'Directory').  
Default is the same name.

OK: The selected TIN is renamed or moved.

Cancel: Cancel rename/move operation and return to previous screen.

Help: This screen.

### 7.3.6 Renaming/moving file



#### Copy file

Use this function to rename or move a file (for instance an ASCII file or an AutoCAD file). It cannot be used to rename/move any coverages (ArcInfo files). Coverages are renamed/moved using the 'Rename/move coverage' option. It is primarily used to rename or move coverages from user directories and project directories. Select the file to be renamed/moved by means of the list boxes or by typing the file path and name in the input field at the top of the list.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

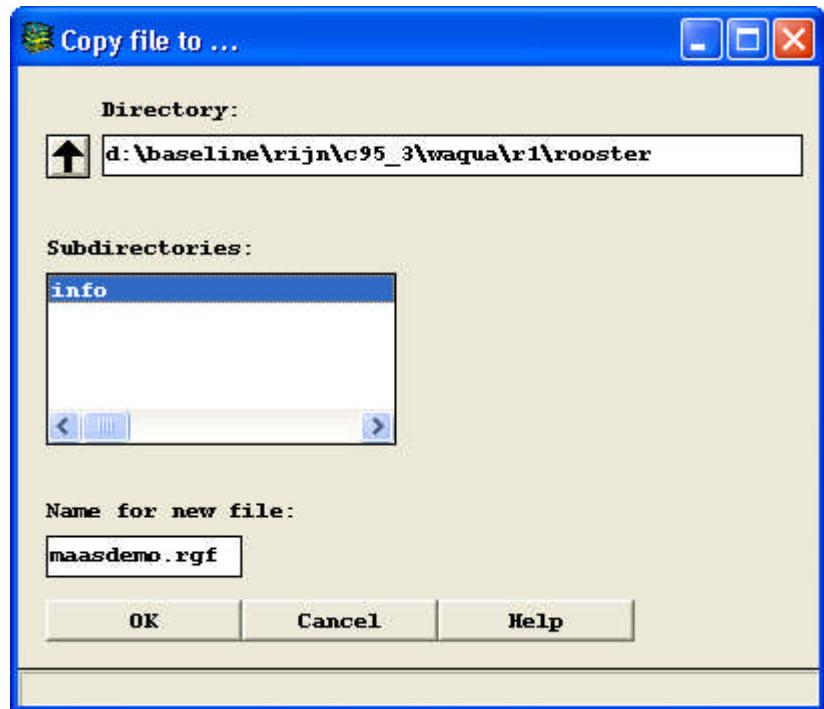
File: Available files in the selected subdirectory.

Search pattern: Enter one or more letters to make a selection from the files shown.  
Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: After the selection, a window will be opened in which you can indicate the new location or the new name of the file.

Cancel: The file is not renamed or moved.

Help: This screen.



### Copy file to ...

Name of the new file after renaming or moving the file (no INFO files).

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory. Selecting a subdirectory will change the current path.

Name for new file: Enter a new name for the file in this input field (in 'Directory'). Default is the same name.

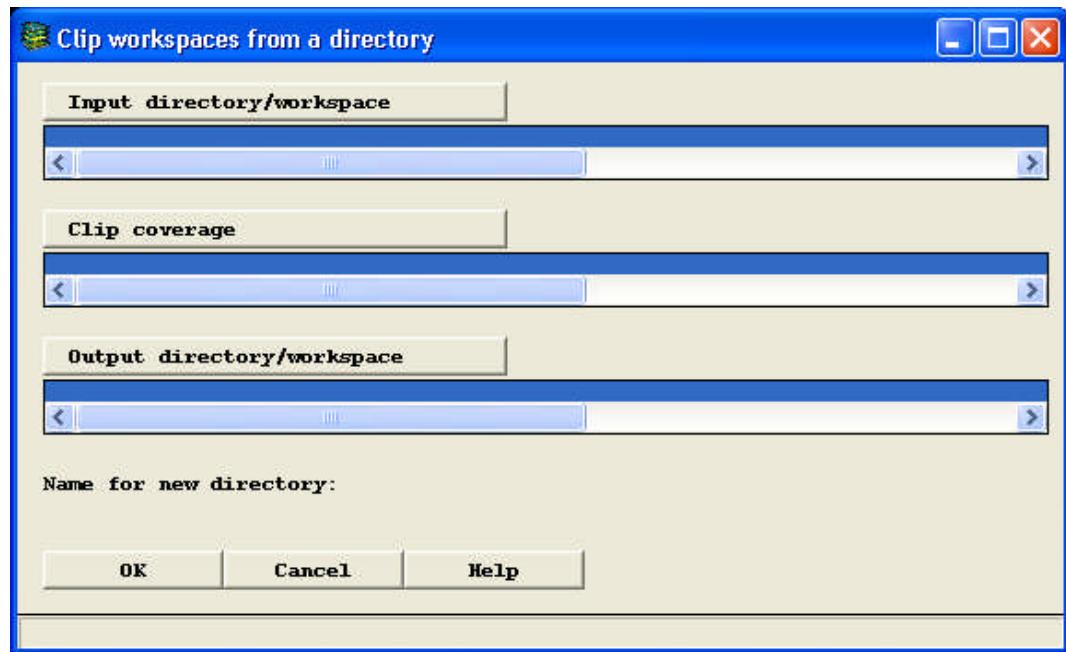
OK: The selected file is renamed or moved.

Cancel: Cancel rename/move operation and return to previous screen.

Help: This screen.

## 7.4 Clipping

### 7.4.1 Clipping Workspaces from a Directory



#### Clip workspaces from a directory

Select a workspace/directory from which the files are to be clipped. Next, select the clip coverage and the directory to which the output will be written. The names of the clipped files are the same as the input file names. Therefore the clipped files are to be clipped to a directory different from the directory with the original files.

The 'clip one workspace' option only clips the coverages in the input directory.

The 'clip workspaces from a directory' option will browse through all subdirectories and clip any coverages present in those subdirectories.

NB. Clipping workspaces from a directory takes a lot of time!!

**Input directory/workspace:** Select the directory from which all coverages are to be clipped.

**Clip coverage:** Select a clipping coverage.

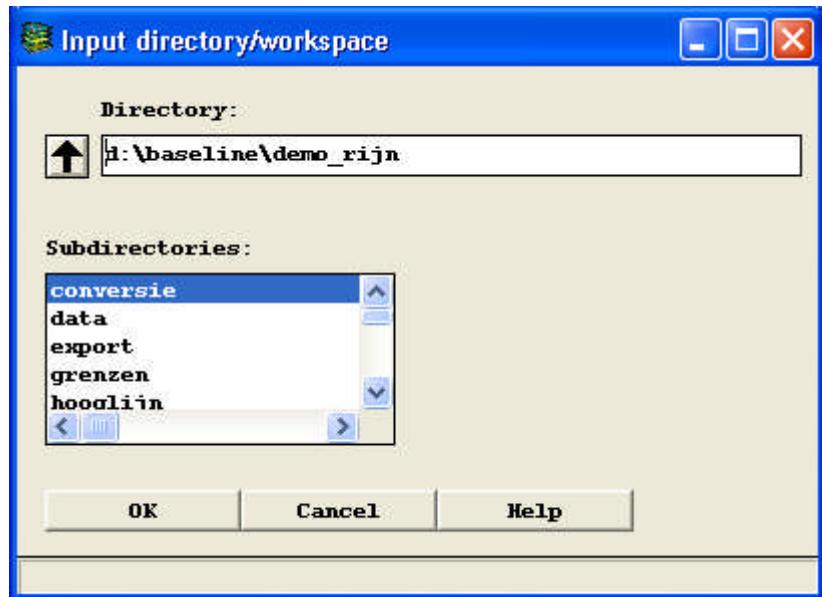
**Output directory/workspace:** Select the directory in which the output directory must be located.

**Name for new directory:** This field shows the name of the directory to be created.

**OK:** Accept the workspaces and clip coverage selected and start clipping.

**Cancel:** Do not make any changes and close the menu.

**Help:** This screen.



### Input directory/workspace

Select an existing workspace/directory to clip a single workspace or all workspaces from a directory.

'Arrow Up': Move up one directory.

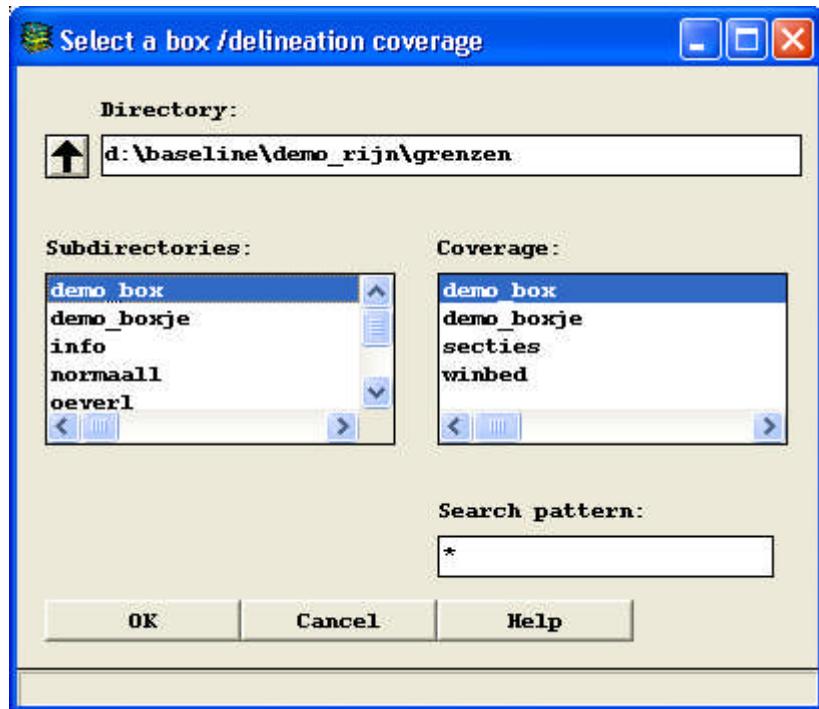
Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

OK: Accept the selected input directory/workspace.

Cancel: No input directory/workspace selection and you are returned to the previous window.

Help: This screen.



#### Select a box/delineation coverage

---

Select a coverage to serve as clipping coverage. The delineation specifies the area to be clipped from the selected files.

'Arrow Up':

Move up one directory.

Directory:

Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories:

Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Coverage:

Available coverages in the current directory.

Search pattern:

Enter one or more letters to make a selection from the coverages shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK:

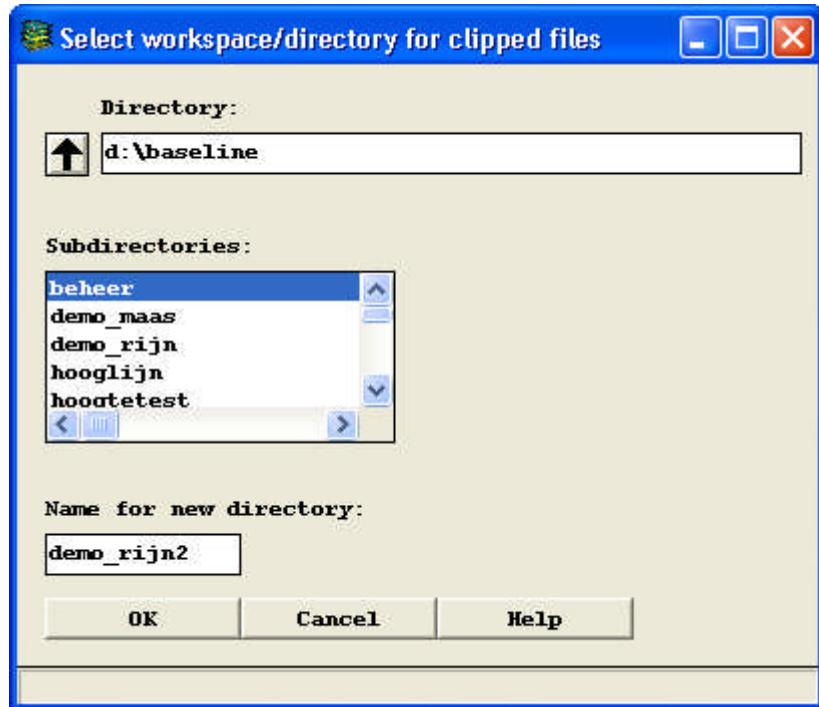
Accept the selected clipping file.

Cancel:

No clip coverage selection and you are returned to the previous window.

Help:

This screen.



#### Select workspace/directory for clipped files

Select the workspace/directory for the clipped files.

PLEASE NOTE: The (clipped) coverages to be created will be given the same name as the previous files. DO NOT save them in the same location as the selected files to be clipped !!!  
This is bound to lead to errors, particularly when the overwrite files question is answered with NO.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

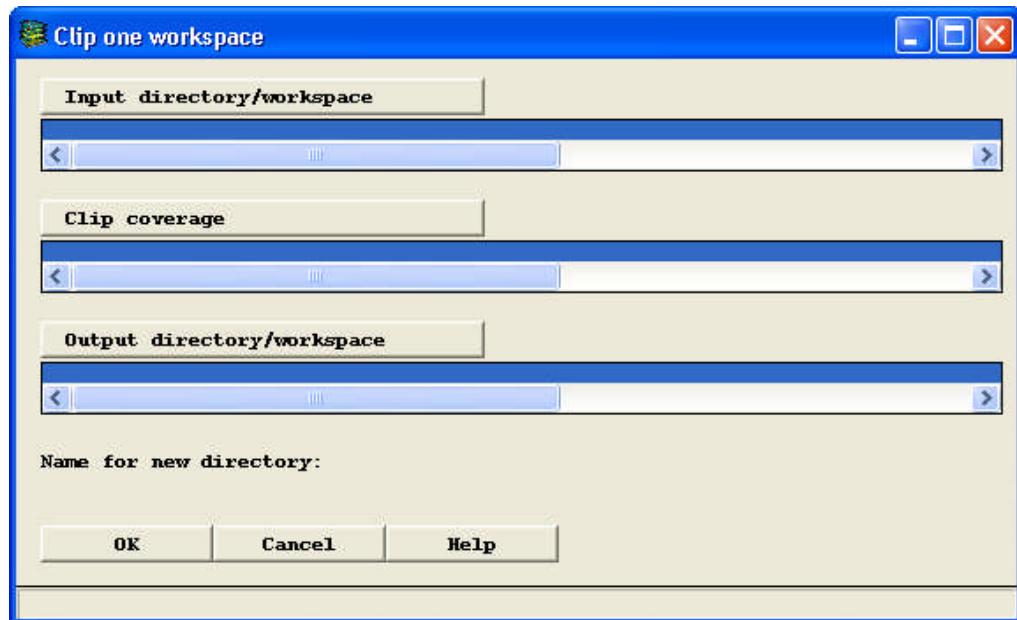
Name for new directory: Use this field to enter the name of the output directory.

OK: Accept the selected output directory/workspace.

Cancel: No output directory/workspace selection and you are returned to the previous window.

Help: This screen.

## 7.4.2 Clipping one workspace



### Clip one workspace

Select the source workspace from which the files are to be clipped. Next, select the clip coverage and the directory to which the output will be written. The names of the clipped files are the same as the input file names. Therefore the clipped files are to be clipped to a directory different from the directory with the original files.

The 'clip one workspace' option only clips the coverages in the input directory.

The 'clip workspaces from a directory' option will browse through all subdirectories and clip any coverages present in those subdirectories.

NB. Clipping workspaces from a directory takes a lot of time!!

**Input directory/workspace:** Select the workspace from which all coverages are to be clipped.

**Clip coverage:** Select a clipping coverage.

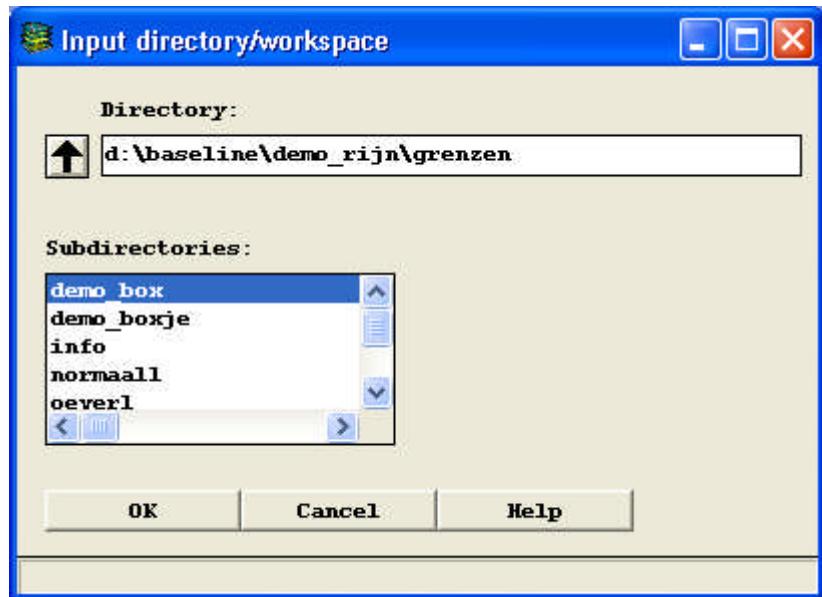
**Output directory/workspace:** Select the directory in which the output directory must be located.

**Name for new directory:** This field shows the name of the directory to be created.

**OK:** Accept the workspaces and clip coverage selected and start clipping.

**Cancel:** Do not make any changes and close the menu.

**Help:** This screen.



### Input directory/workspace

Select an existing workspace/directory to clip a single workspace or all workspaces from a directory.

'Arrow Up': Move up one directory.

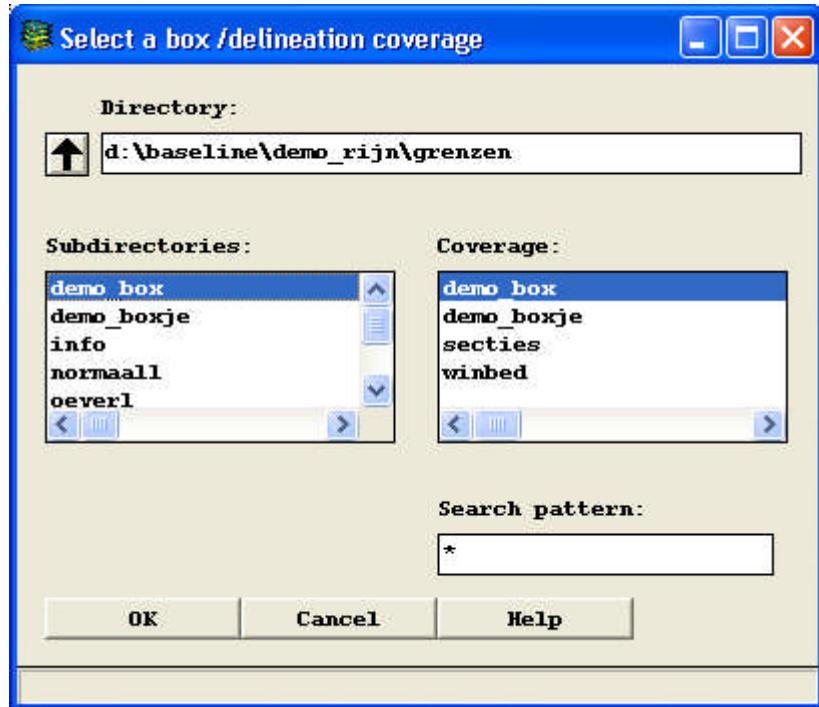
Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

OK: Accept the selected input directory/workspace.

Cancel: No input directory/workspace selection and you are returned to the previous window.

Help: This screen.



#### Select a box/delineation coverage

---

Select a coverage to serve as clipping coverage. The delineation specifies the area to be clipped from the selected files.

'Arrow Up':

Move up one directory.

Directory:

Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories:

Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Coverage:

Available coverages in the current directory.

Search pattern:

Enter one or more letters to make a selection from the coverages shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK:

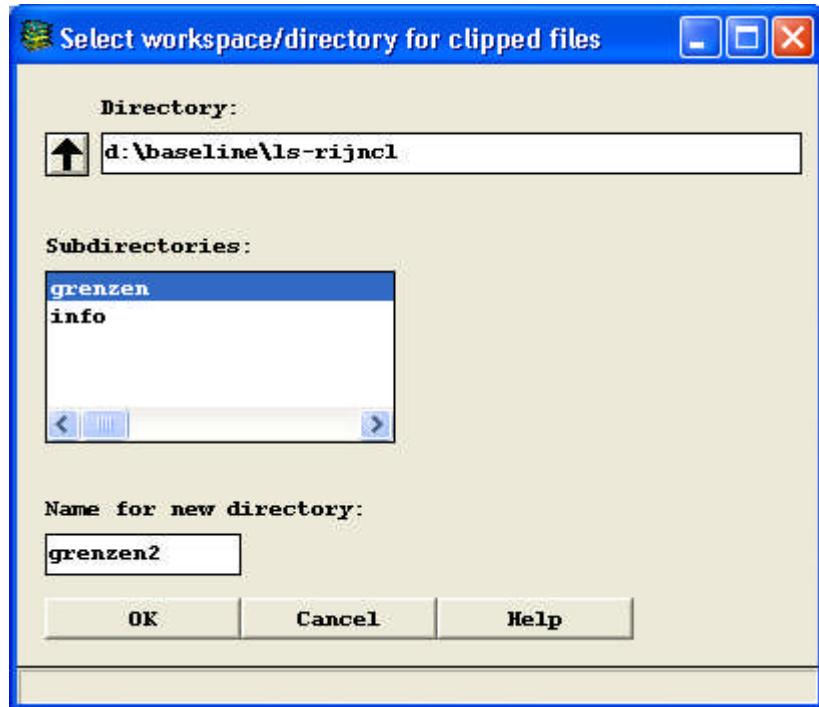
Accept the selected clipping file.

Cancel:

No clip coverage selection and you are returned to the previous window.

Help:

This screen.



### Select workspace/directory for clipped files

---

Select the workspace/directory for the clipped files.

PLEASE NOTE: The (clipped) coverages to be created will be given the same name as the previous files. DO NOT save them in the same location as the selected files to be clipped !!!  
This is bound to lead to errors, particularly when the overwrite files question is answered with NO.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

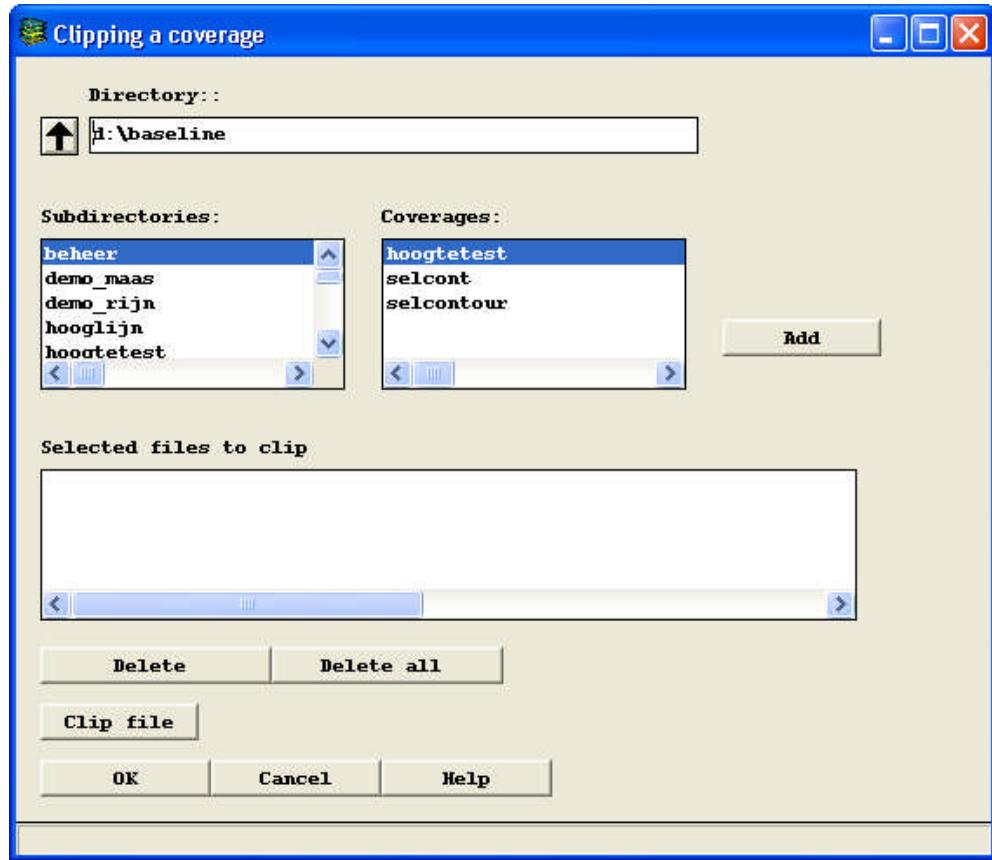
Name for new directory: Use this field to enter the name of the output directory.

OK: Accept the selected output directory/workspace.

Cancel: No output directory/workspace selection and you are returned to the previous window.

Help: This screen.

### 7.4.3 Clipping a Geo data set: Coverage



#### Clipping a coverage

Use a predefined box or delineation file to clip files. Select all files required or even all basic files containing the delineation of the file in question and save them as user files.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Coverages: All available coverages in the current directory.

Add: Add the selected coverage to the list of coverages to be clipped.

Selected files to clip: List of coverages to be clipped with the clipping coverage.

Delete: Remove the selected coverages from the list.

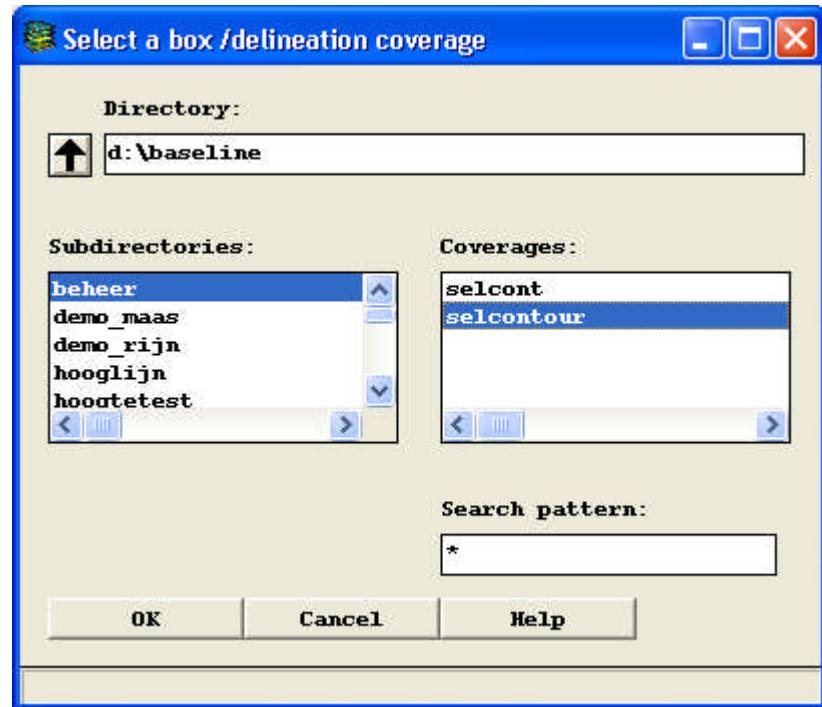
Delete all: Delete all coverages from the list.

Clip coverage: Select a box or delineation coverage.

OK: Select a workspace for clipped coverages.

Cancel: The menu is closed; no clipping action is performed.

Help: This screen.



### Select a box/delineation coverage

---

Select a coverage to serve as clipping coverage. The delineation specifies the area to be clipped from the selected files.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

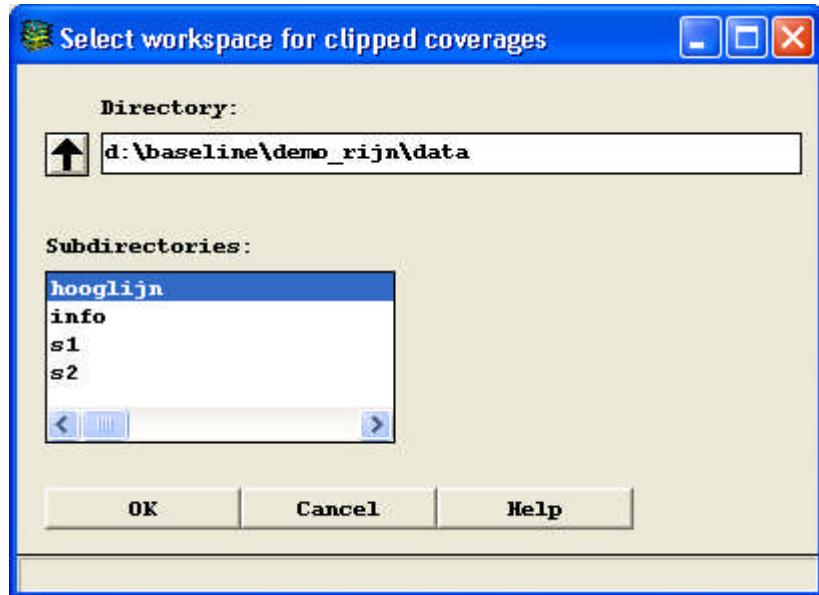
Coverages: Available coverages in the current directory.

Search pattern: Enter one or more letters to make a selection from the coverages shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: Accept the selected clipping file.

Cancel: No clip coverage selection and you are returned to the previous window.

Help: This screen.



### Select workspace for clipped coverages

---

Select the target workspace for the clipped files.

**PLEASE NOTE:** The (clipped) coverages to be created will be given the same name as the previous files. DO NOT save them in the same location as the selected files to be clipped !!! This is bound to lead to errors, particularly when the overwrite files question is answered with NO.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

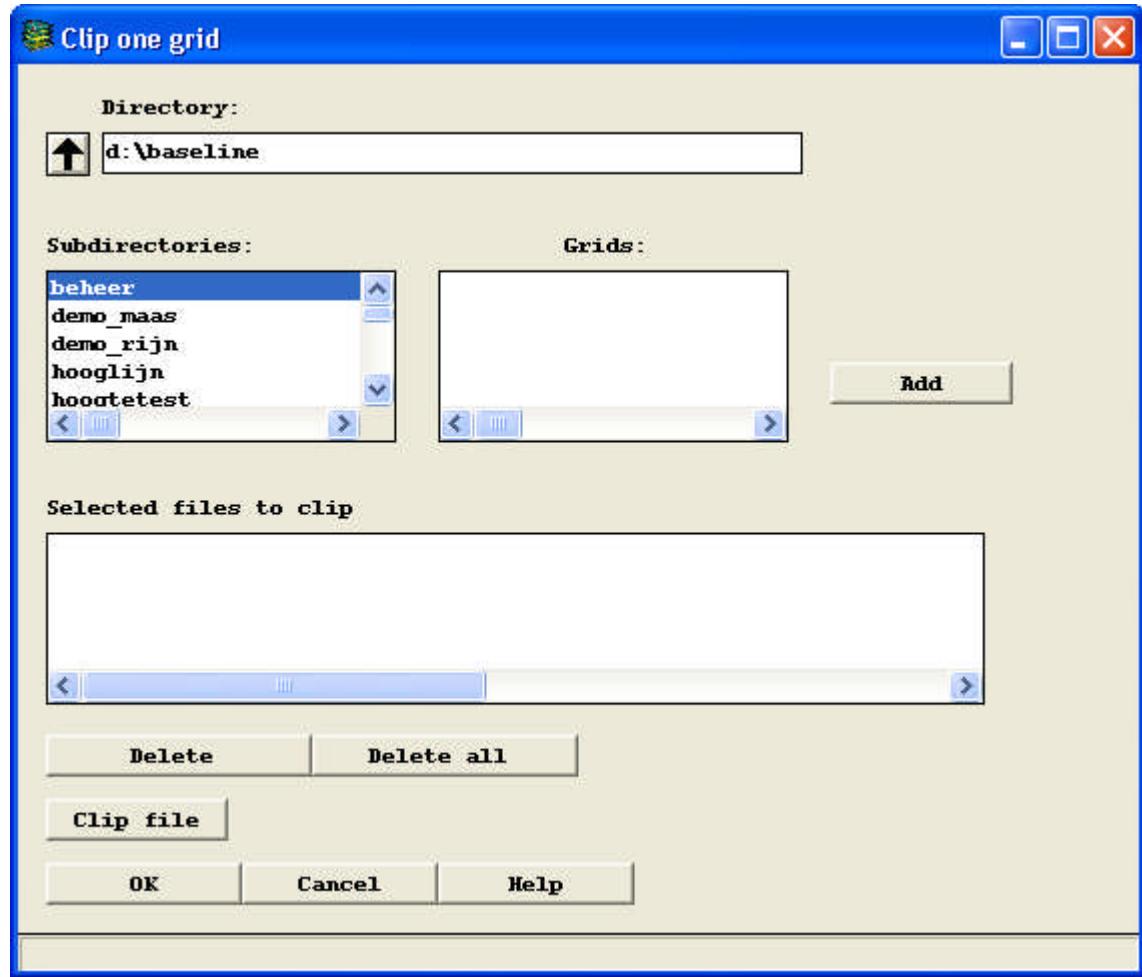
Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

OK: Accept the selected workspace.

Cancel: No output workspace selection and you are returned to the previous window.

Help: This screen.

#### 7.4.4 Clipping a Geo data set: Grid



##### Clip one grid

Use a predefined box or delineation file to clip files. Select all files required or even all basic files containing the delineation of the file in question and save them as user files.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

Grids: All available grids in the current directory.

Add: Add the selected grid to the list of grids to be clipped.

Selected files to clip: List of grids to be clipped with the clipping coverage.

Delete: Delete the selected grids from the list.

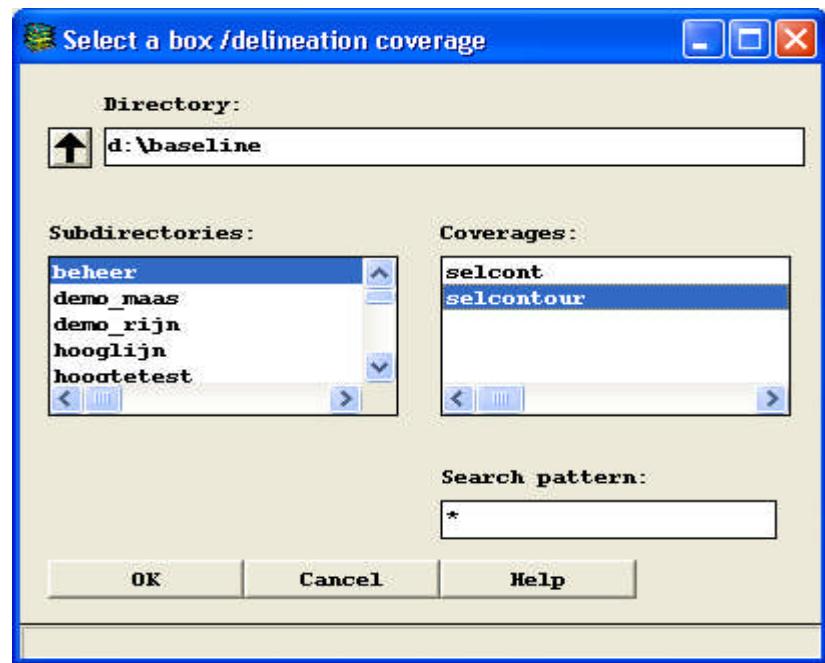
Delete all: Delete all grids from the list.

Clip coverage: Select a box or delineation coverage.

OK: Select a workspace for clipped grids.

Cancel: The menu is closed; no clipping action is performed.

Help: This screen.



#### Select a box/delineation coverage

Select a coverage to serve as clipping coverage. The delineation specifies the area to be clipped from the selected files.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

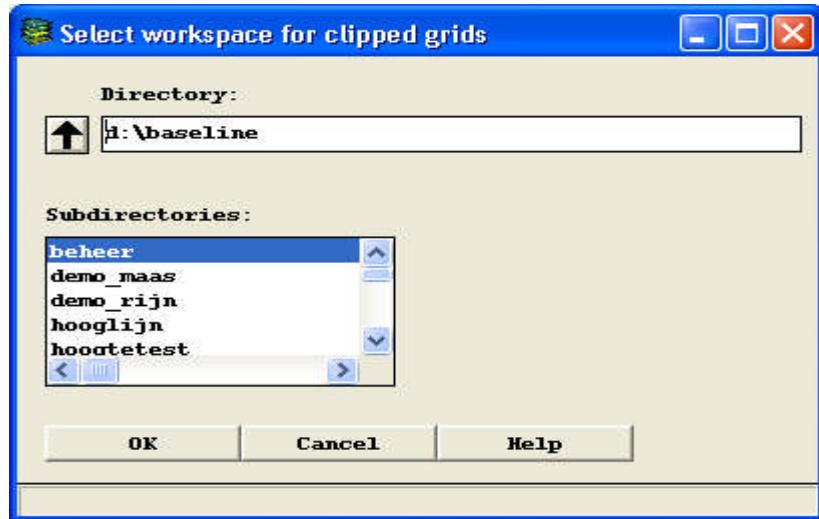
Coverages: Available coverages in the current directory.

Search pattern: Enter one or more letters to make a selection from the coverages shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: Accept the selected clipping file.

Cancel: No clip coverage selection and you are returned to the previous window.

Help: This screen.



### Select workspace for clipped grids

---

Select the target workspace for the clipped files.

**PLEASE NOTE:** The (clipped) grids to be created will be given the same name as the previous files. DO NOT save them in the same location as the selected files to be clipped !!! This is bound to lead to errors, particularly when the overwrite files question is answered with NO.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

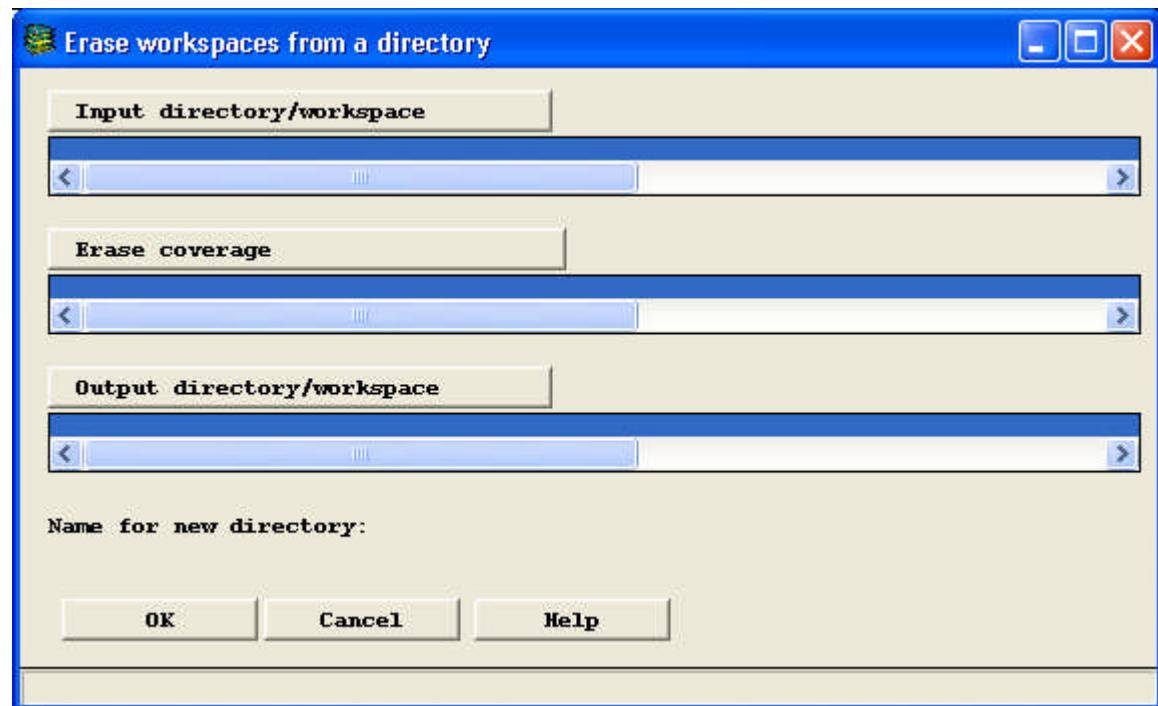
OK: Accept the selected workspace.

Cancel: No output workspace selection and you are returned to the previous window.

Help: This screen.

## 7.5 Erasing

### 7.5.1 Erase workspaces from a directory



#### Erase workspaces from a directory

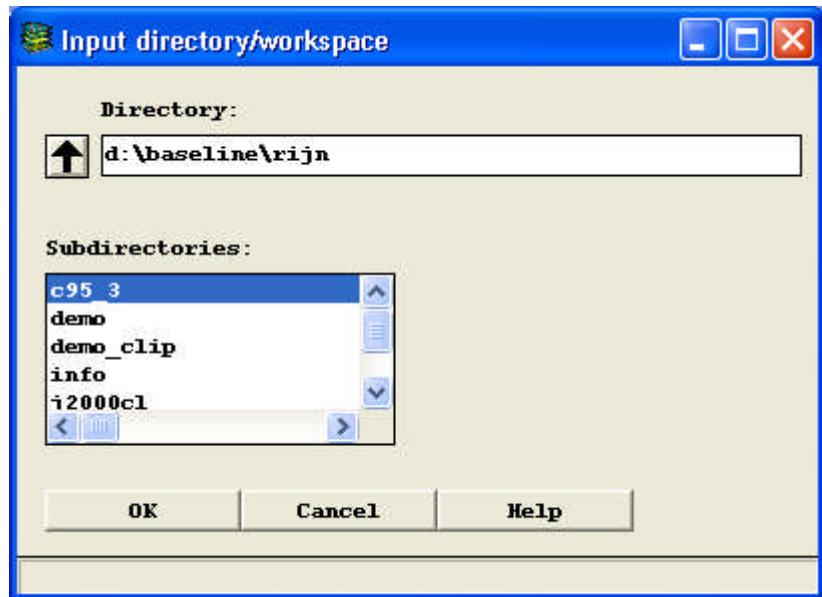
Select the source workspace from which the files are to be erased. Next, select the erase coverage and the directory to which the output will be written. The names of the erased files are the same as the input file names. Therefore, the erased files are to be written to a directory different from the directory with the original files.

The 'erase one workspace' option only erases the coverages in the input directory.

The 'erase workspaces from a directory' option will browse through all subdirectories and erase any coverages present in those subdirectories.

NB. Erasing workspaces from a directory takes a lot of time!!

Input directory/workspace:	Select the directory from which all coverages are to be erased.
Erase coverage:	Select an erasing coverage.
Output directory/workspace:	Select the directory in which the output directory must be located.
Name for new directory:	This field shows the new name of the directory to be created.
OK:	Accept the workspaces and erase coverage selected and start erasing.
Cancel:	Do not make any changes and close the menu.
Help:	This screen.



### Input directory/workspace

Select an existing workspace/directory to erase a single workspace or all workspaces from a directory.

'Arrow Up': Move up one directory.

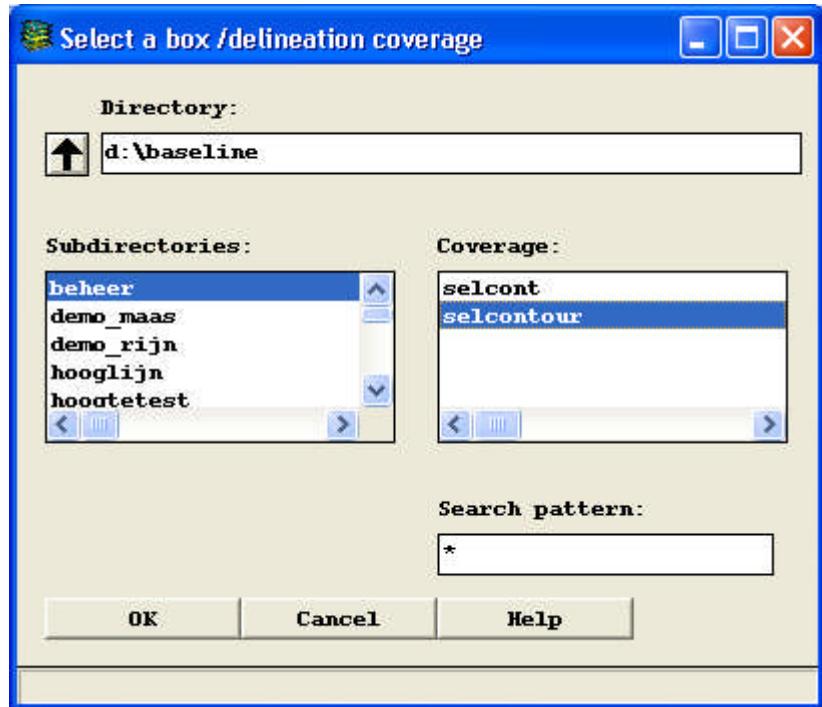
Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

OK: Accept the workspace/directory selected.

Cancel: No input directory/workspace selection and you are returned to the previous window.

Help: This screen.



#### Select a box/delineation coverage

---

Select a coverage to serve as erase coverage. The delineation specifies the area to be erased from the selected files.

'Arrow Up':

Move up one directory.

Directory:

Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories:

Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

Coverage:

Available coverages in the current directory.

Search pattern:

Enter one or more letters to make a selection from the coverages shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK:

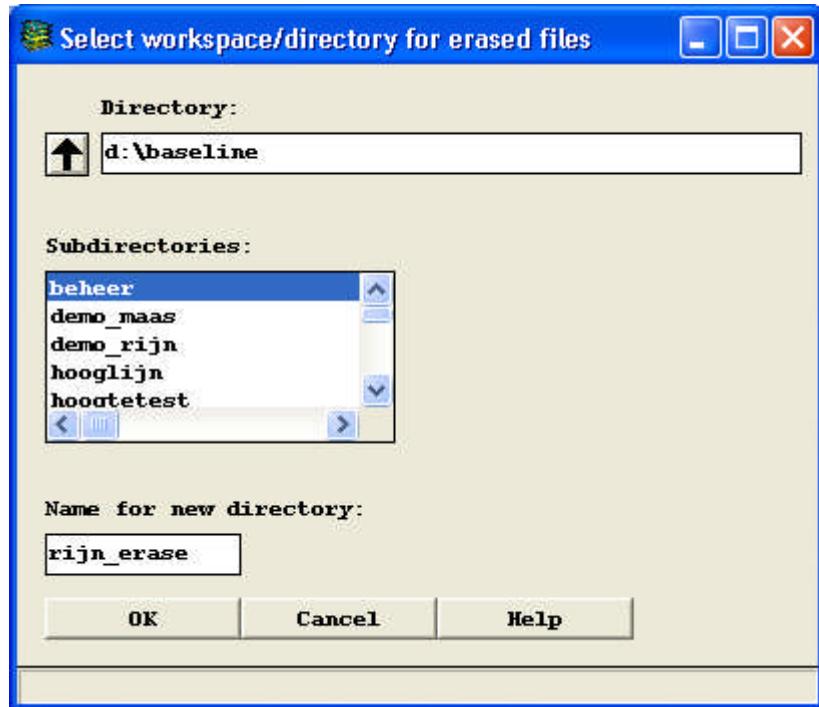
Accept the selected erase coverage.

Cancel:

No erase coverage selection and you are returned to the previous window.

Help:

This screen.



#### Select workspace/directory for erased files

Select the target workspace/directory where the erased files are to be located. The names of the erased files are the same as the input file names. Therefore, the erased files are to be written to a directory different from the directory with the original files.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

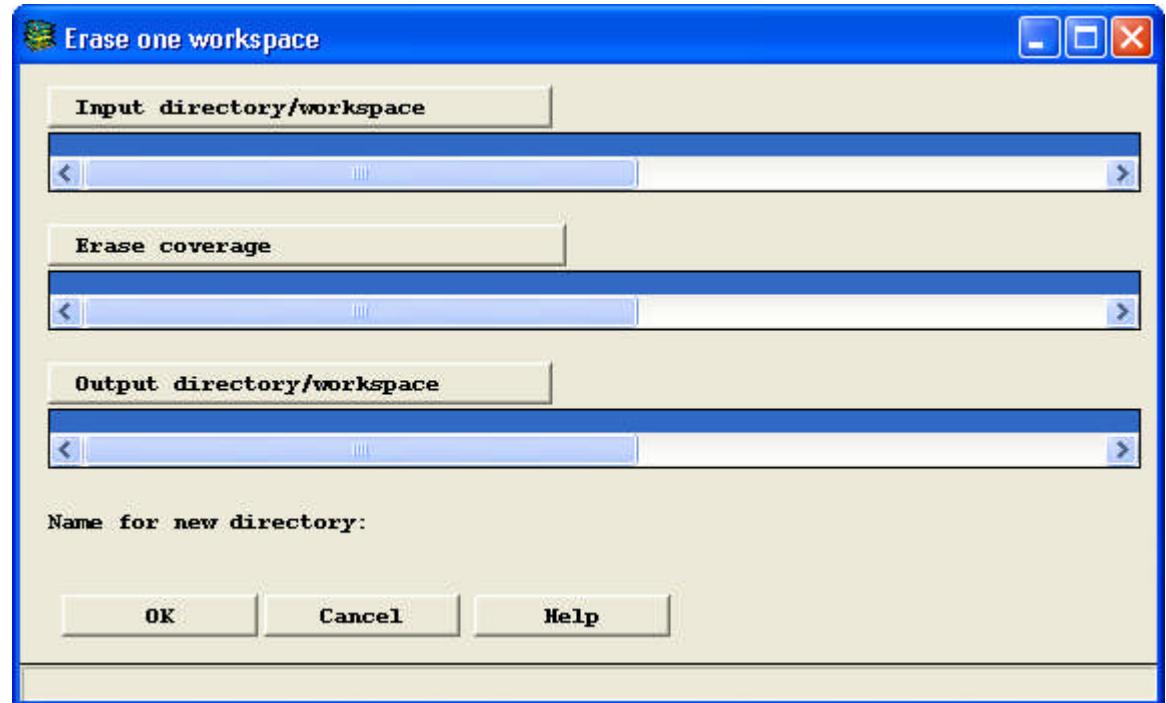
Name for new directory: Use this field to enter the name of the output directory.

OK: Accept the selected directory.

Cancel: No output directory/workspace selection and you are returned to the previous window.

Help: This screen.

### 7.5.2 Erasing one workspace



#### Erase one workspace

Select the source workspace from which the files are to be erased. Next, select the erase coverage and the directory to which the output will be written. The names of the erased files are the same as the input file names. Therefore, the erased files are to be written to a directory different from the directory with the original files.

The 'erase one workspace' option only erases the coverages in the input directory.

The 'erase workspaces from a directory' option will browse through all subdirectories and erase any coverages present in those subdirectories.

NB. Erasing workspaces from a directory takes a lot of time!!

**Input directory/workspace:** Select the directory from which all coverages are to be erased.

**Erase coverage:** Select an erasing coverage.

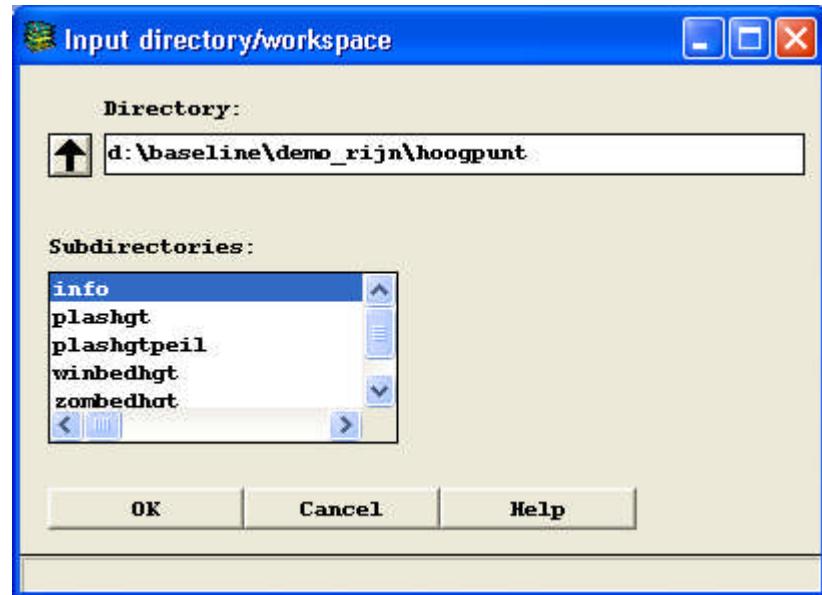
**Output directory/workspace:** Select the directory in which the output directory must be located.

**Name for new directory:** This field shows the new name of the directory to be created.

**OK:** Accept the workspaces and erase coverage selected and start erasing.

Cancel: Do not make any changes and close the menu.

Help: This screen.



#### Input directory/workspace

Select an existing workspace/directory to erase a single workspace or all workspaces from a directory.

'Arrow Up': Move up one directory.

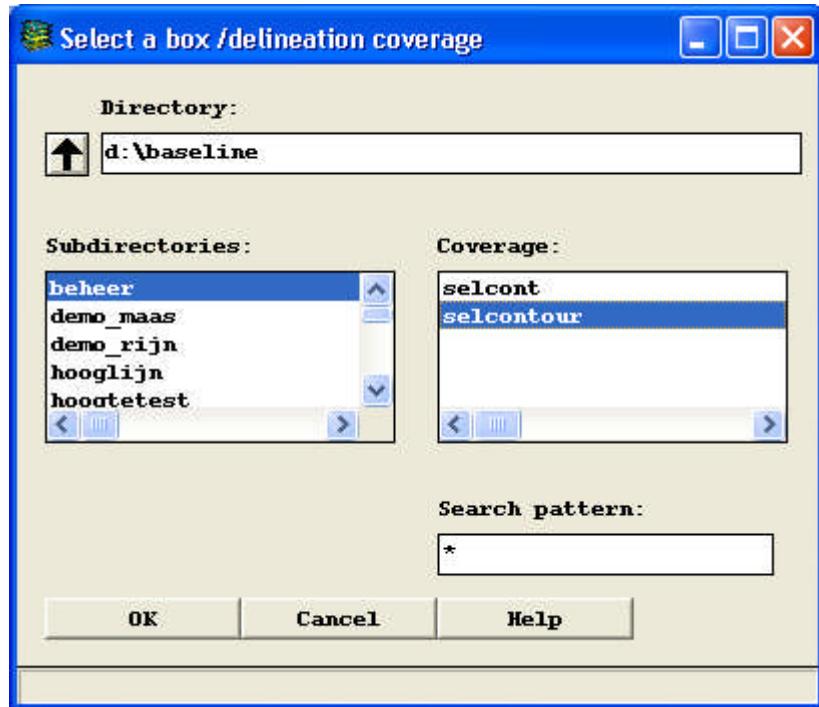
Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

OK: Accept the workspace/directory selected.

Cancel: No input directory/workspace selection and you are returned to the previous window.

Help: This screen.



#### Select a box/delineation coverage

---

Select a coverage to serve as erase coverage. The delineation specifies the area to be erased from the selected files.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

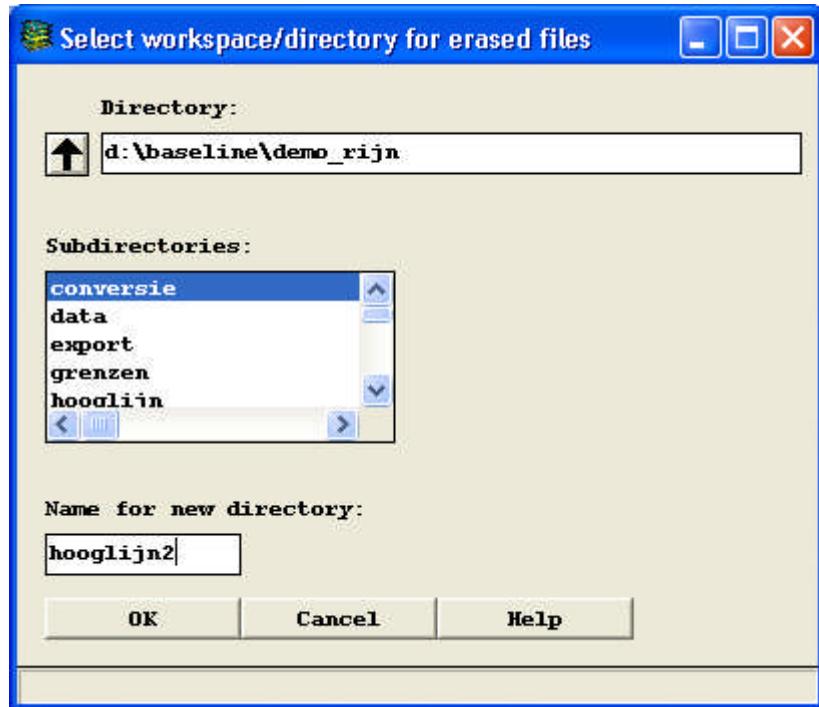
Coverage: Available coverages in the current directory.

Search pattern: Enter one or more letters to make a selection from the coverages shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: Accept the selected erase coverage.

Cancel: No erase coverage selection and you are returned to the previous window.

Help: This screen.



#### Select workspace/directory for erased files

Select the target workspace/directory where the erased files are to be located. The names of the erased files are the same as the input file names. Therefore, the erased files are to be written to a directory different from the directory with the original files.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

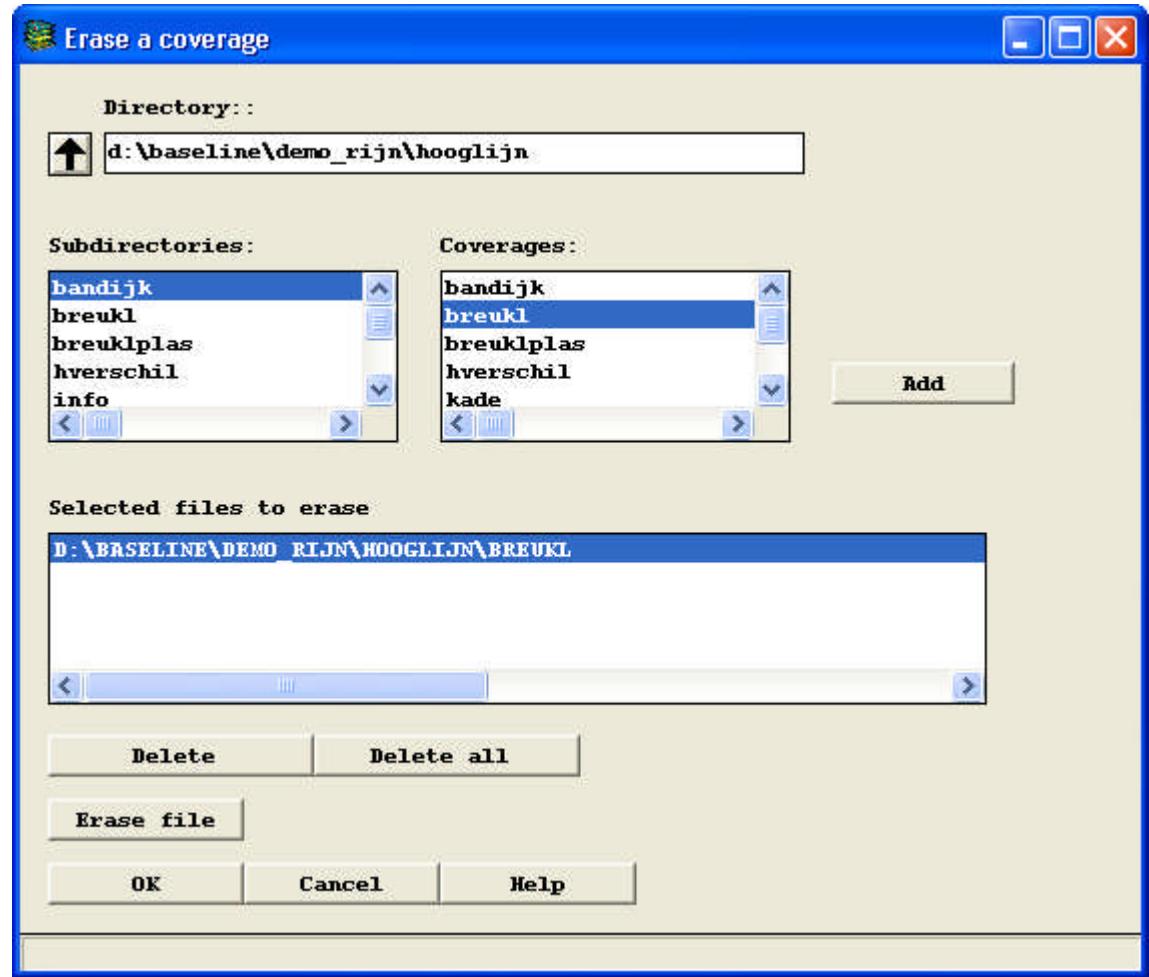
Name for new directory: Use this field to enter the name of the output directory.

OK: Accept the selected directory.

Cancel: No output directory/workspace selection and you are returned to the previous window.

Help: This screen.

### 7.5.3 Erasing geo data set: coverage



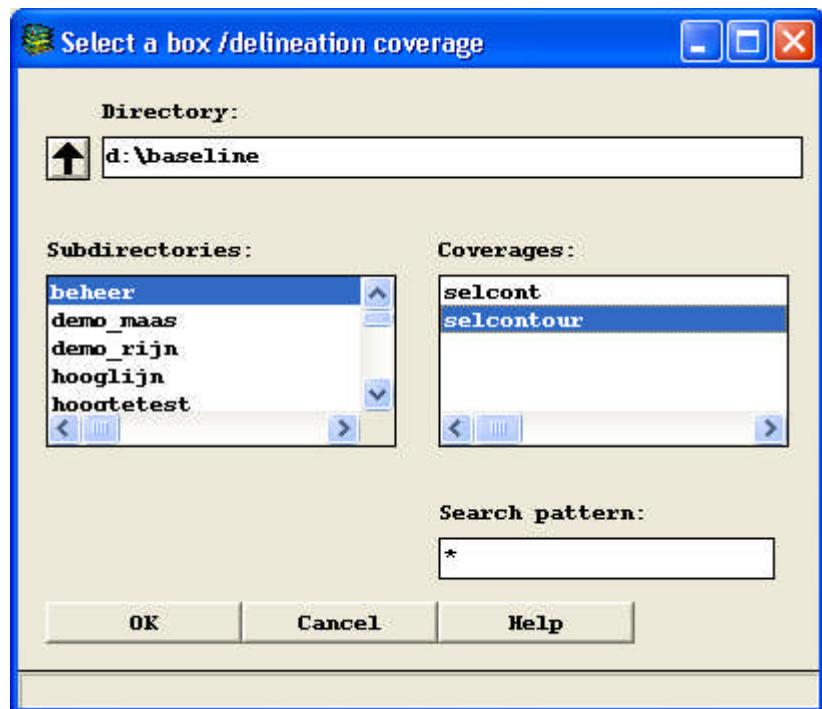
#### Erase a coverage

Use a predefined box or delineation file to erase other files. Select all files required or even all basic files containing the delineation of the file in question and save them as user files.

'Arrow Up':	Move up one directory.
Subdirectories:	Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.
Coverages:	All available coverages in the current directory.
Add:	Add the selected coverage to the list of coverages to be erased.
Selected files to erase:	List of coverages to be erased with the erase box.
Delete:	Remove the selected coverages from the list.
Delete all:	Delete all coverages from the list.
Erase file:	Select a box or delineation coverage.
OK:	Select target workspace for erased coverages.

Cancel: The menu is closed; no erasing action is performed.

Help: This screen.



#### Select a box/delineation coverage

Select a coverage to serve as erase coverage. The delineation specifies the area to be erased from the selected files.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

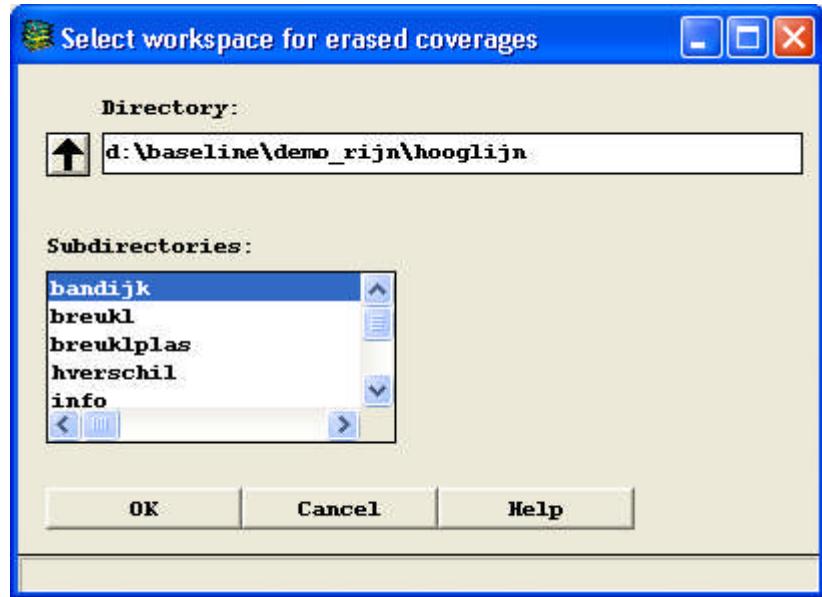
Coverage: Available coverages in the current directory.

Search pattern: Enter one or more letters to make a selection from the coverages shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: Accept the selected erase coverage.

Cancel: No erase coverage selection and you are returned to the previous window.

Help: This screen.



#### Select workspace for erased coverages

---

Select the target workspace/directory where the erased files are to be located. The names of the erased files are the same as the input file names. Therefore, the erased files are to be erased to a directory different from the directory with the original files.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the 'Directory'.

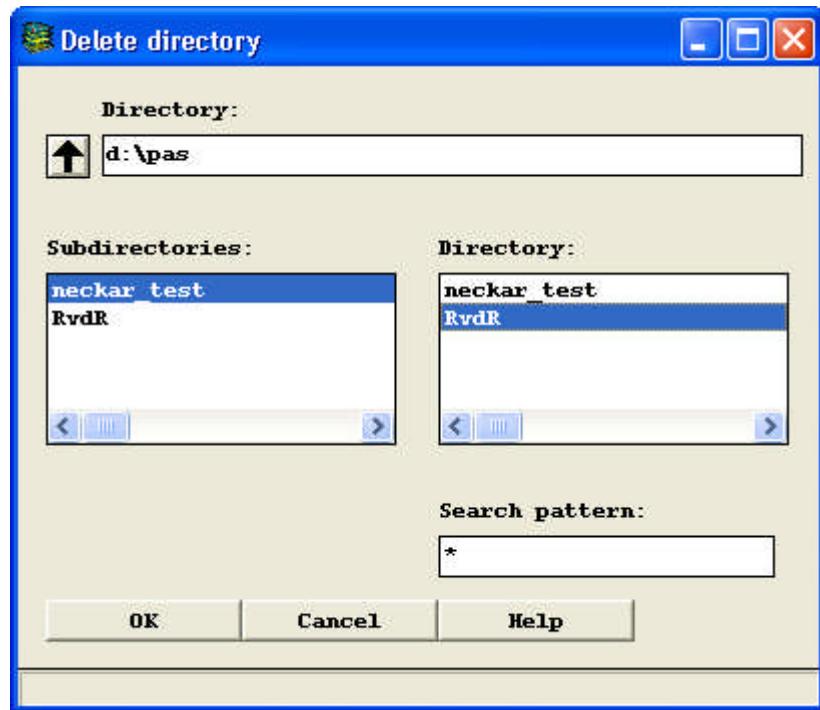
OK: Accept the selected workspace.

Cancel: No output directory/workspace selection and you are returned to the previous window.

Help: This screen.

## 7.6 Deleting

### 7.6.1 Delete directory



#### Delete directory

Use this function to remove an entire directory, including its subdirectories and any files contained in it. It is primarily used to delete user directories and project directories. Users are not authorised to delete directories containing basic files and variants.

Select the directory to be deleted by means of the list boxes or by typing the directory path and name in the input field at the top of the list.

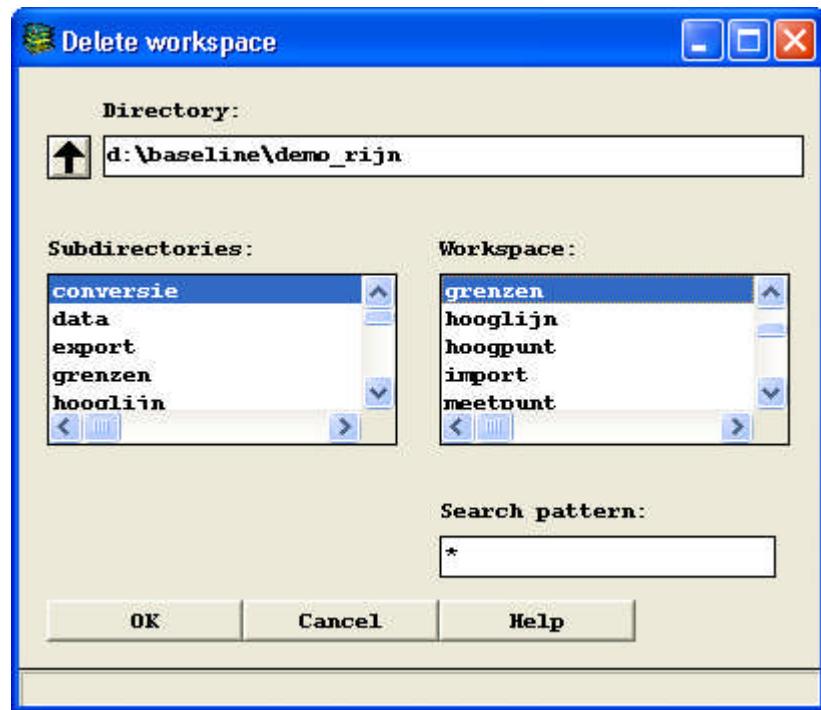
'Arrow Up':	Move up one directory.
Directory:	This input field shows the current path.
Subdirectories:	Summary of available subdirectories in current directory. Choosing a subdirectory will change the 'Directory'.
Directory:	Available directories in the selected subdirectory.
Search pattern:	Enter one or more letters to make a selection from the directories shown. Use the wildcard * to replace a number of unknown letters and ? to replace a single unknown letter.
OK:	User confirmation in the next window is required to remove the selected directory.
Cancel:	No directory will be deleted.
Help:	This screen.



Yes: The selected directory is deleted.

No: No directory will be deleted.

## 7.6.2 Deleting Workspace



### Delete workspace

---

Use this function to remove an entire workspace, including its subdirectories and any files contained in it. It is primarily used to delete user directories and project directories. Users are not authorised to delete any workspaces containing basic files and variants. Select the workspace to be deleted by means of the list boxes or by typing the workspace path and name in the input field at the top of the list.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory. Choosing a subdirectory will change the 'Directory'.

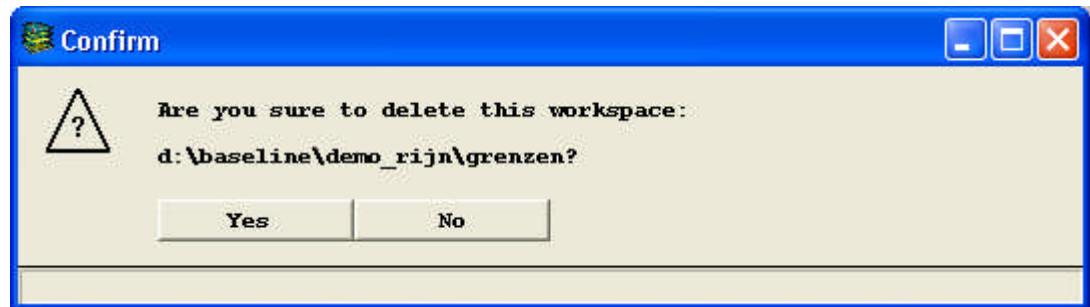
Workspace: Available workspaces in the selected subdirectory.

Search pattern: Enter one or more letters to make a selection from the workspaces shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: User confirmation in the next window is required to remove the selected directory.

Cancel: No workspace will be deleted.

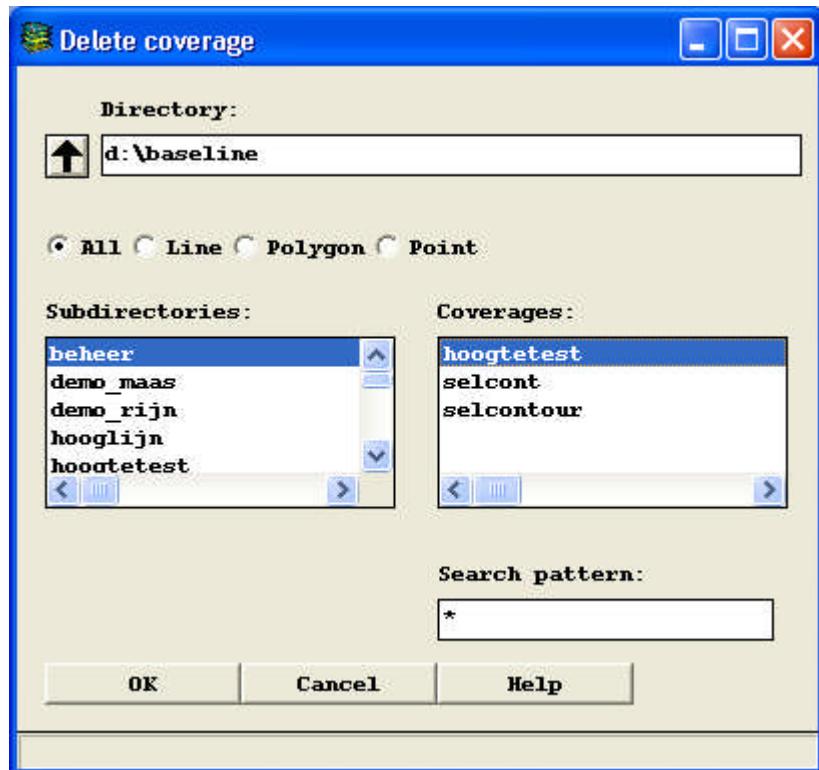
Help: This screen.



Yes: The selected workspace is deleted.

No: No workspace will be deleted.

### 7.6.3 Deleting geo data set: Coverage



#### Delete coverage

Use this function to delete a coverage (ArcInfo file). It is primarily used to delete coverages from user directories and project directories. Users are not authorised to delete any basic files and variants. Select the coverage to be deleted by means of the list boxes or by typing the coverage path and name in the input field at the top of the list.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

All: Select all available coverages.

Line: Select line coverages only.

Polygon: Select polygon coverages only.

Point: Select point coverages only.

If a coverage contains both lines and points, both will be deleted.

Subdirectories: Summary of available subdirectories in current directory. Choosing a subdirectory will change the 'Directory'.

Coverages: Available coverages in the selected subdirectory.

Search pattern: Enter one or more letters to make a selection from the coverages shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: User confirmation in the next window is required to remove the selected directory.

Cancel: No coverage will be deleted.

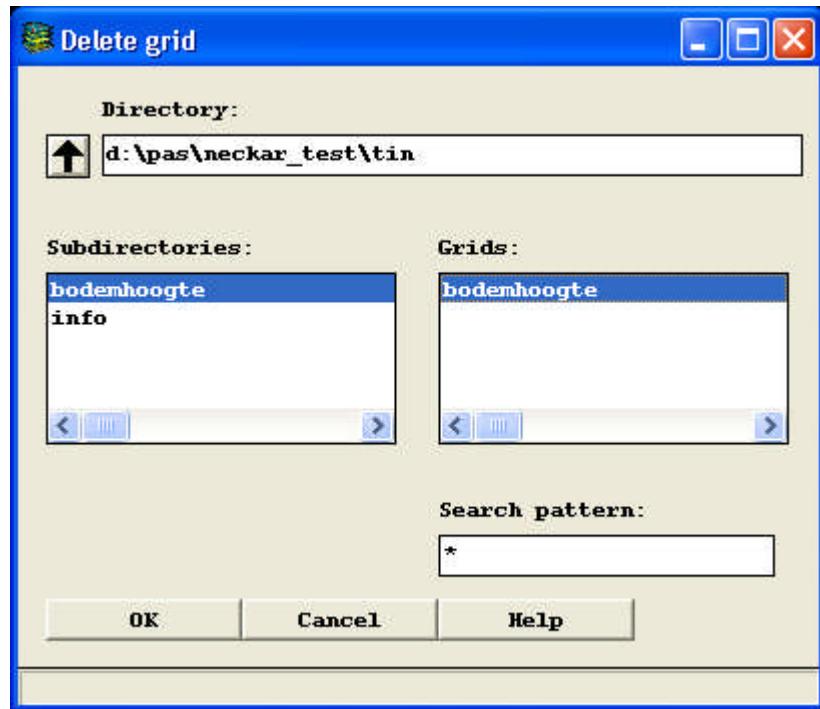
Help: This screen.



Yes: The selected coverage is deleted.

No: No coverage will be deleted.

#### 7.6.4 Deleting geo data set: Grid



##### Delete grid

Use this function to delete a grid (ArcInfo file). It is primarily used to delete grids from user directories and project directories. Users are not authorised to delete any basic files and variants. Select the grid to be deleted by means of the list boxes or by typing the grid path and name in the input field at the top of the list.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory. Choosing a subdirectory will change the 'Directory'.

Coverages: Available grids in the selected subdirectory.

Search pattern: Enter one or more letters to make a selection from the grids shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: User confirmation in the next window is required to remove the selected directory.

Cancel: No grid will be deleted.

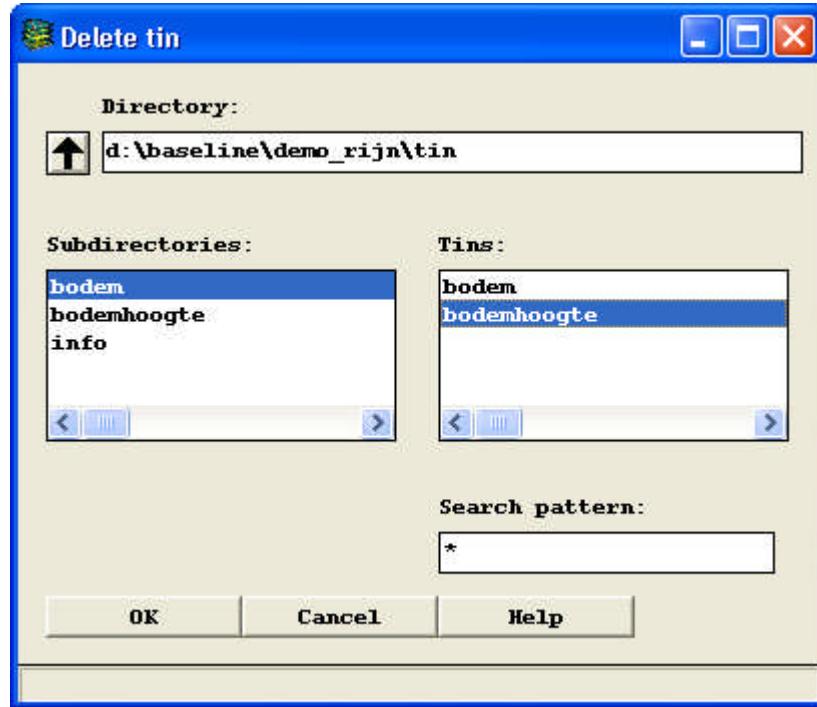
Help: This screen.



Yes: The selected grid is deleted.

No: No grid will be deleted.

### 7.6.5 Deleting geo data set: Tin

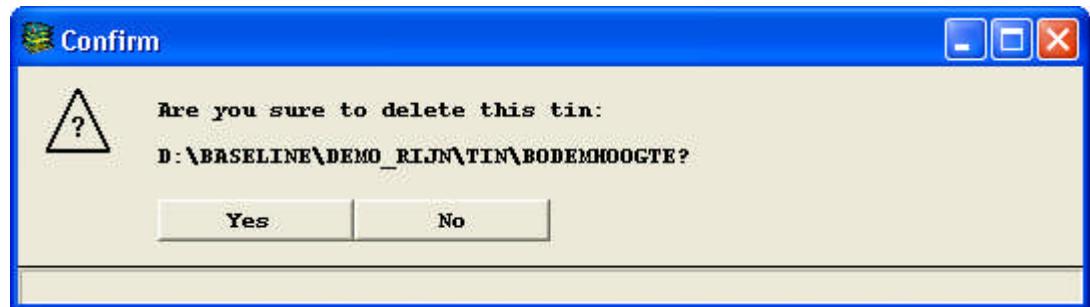


#### Delete tin

---

Use this function to delete a tin (ArcInfo file). It is primarily used to delete tins from user directories and project directories. Users are not authorised to delete any basic files and variants. Select the tin to be deleted by means of the list boxes or by typing the tin path and name in the input field at the top of the list.

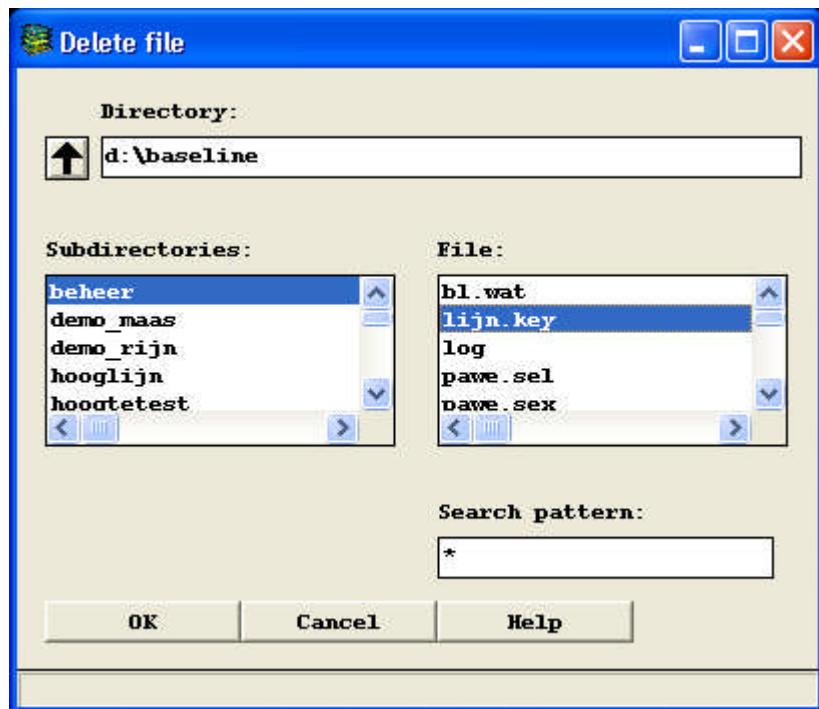
'Arrow Up':	Move up one directory.
Directory:	This input field shows the current path.
Subdirectories:	Summary of available subdirectories in current directory. Choosing a subdirectory will change the 'Directory'.
Tins:	Available tins in the selected subdirectory.
Search pattern:	Enter one or more letters to make a selection from the tins shown. Use the wildcard * to replace a number of unknown letters and ? to replace a single unknown letter.
OK:	User confirmation in the next window is required to remove the selected directory.
Cancel:	No tin will be deleted.
Help:	This screen.



Yes: The selected tin is deleted.

No: No tin will be deleted.

## 7.6.6 Deleting File

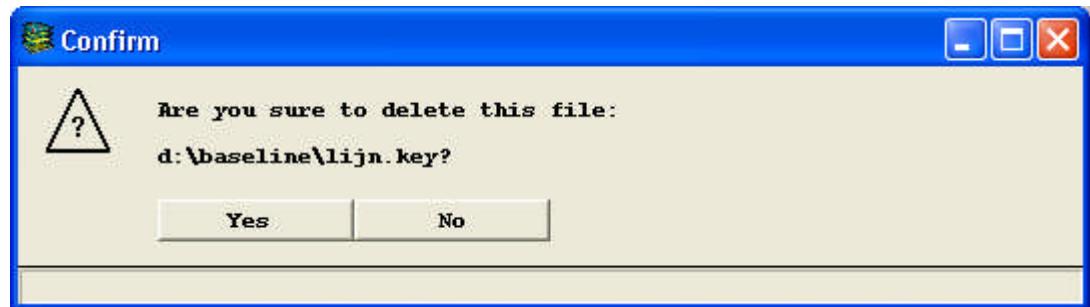


### Delete file

Use this function to delete a file (for instance an ASCII file or an AutoCAD file). It cannot be used to delete any coverages (ArcInfo files). Coverages are deleted using the Delete coverage option. Users have no authorisation to delete files from the basic file and variant directories.

Select the file to be deleted by means of the list boxes or by typing the file path and name in the input field at the top of the list.

'Arrow Up':	Move up one directory.
Directory:	This input field shows the current path.
Subdirectories:	Summary of available subdirectories in current directory. Choosing a subdirectory will change the 'Directory'.
File:	Available files in the selected subdirectory.
Search pattern:	Enter one or more letters to make a selection from the files shown. Use the wildcard * to replace a number of unknown letters and ? to replace a single unknown letter.
OK:	User confirmation in the next window is required to remove the selected directory.
Cancel:	No file will be deleted.
Help:	This screen.

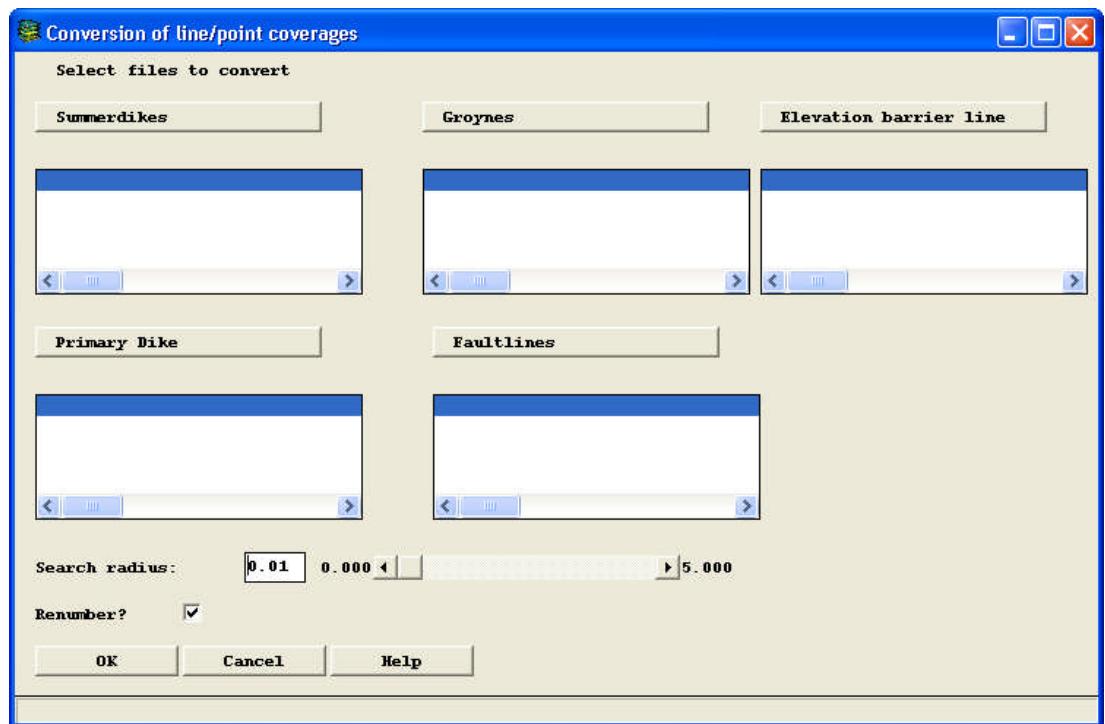


Yes: The selected file is deleted.

No: No file will be deleted.

## 7.7 Conversion

### 7.7.1 Coverages with lines and points



#### Conversion of line/point coverages

This function is used to convert the following coverages: summer dikes, groynes, elevation boundary lines, primary dikes and fault lines. The conversion combines points and lines with the same number within the search radius indicated by the user. Within this radius, the points are put on the line. To the line a vertex may be added. After the conversion each point coincides with a vertex. Missing vertex points are added. If necessary, missing elevation data is allocated to the points by means of interpolation. Points lying within a range of 0.01 metre are removed. Eventually, each location will only have one point. The user is offered the option of renumbering all lines and points. This means that all lines and points are numbered consecutively, starting at one. This eliminates any high and missing numbers. After the conversion, each line has a unique number, all points (within the search radius) are part of the line, any duplicate points have been removed and each vertex has been allocated elevation data. Points lying outside the search radius are written to a separate file. The name of this file is the name of the coverage to be converted to which *\_af* is added. Lines to which no elevation data points could be allocated, are rejected. They are NOT saved separately. These lines are described in the *baswaq.log* file created during the conversion. The file is overwritten for each coverage to be converted. The *baswaq.log* file only contains data from the coverage converted last.

This line/point conversion is very useful for purging the database, which may become necessary due to the ArcInfo operations performed on this data or the interactive adding of lines and points.

Summer dikes:	Select the summer dike coverages to be converted.
Groynes:	Select the groyne coverages to be converted.
Elevation barrier line:	Select the elevation barrier line coverages to be converted.
Primary dikes:	Select the primary dike coverages to be converted.
Fault lines:	Select the fault line coverages to be converted.

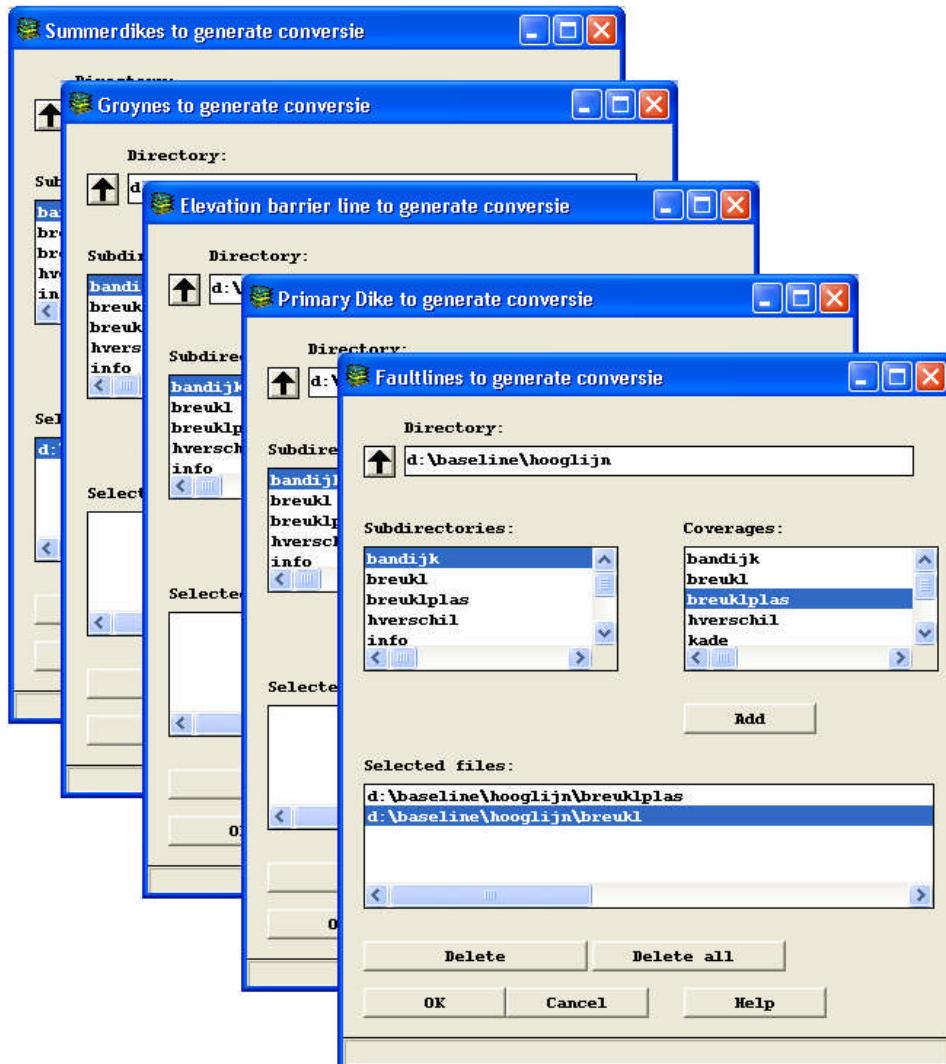
Search radius: Enter the required search radius. This radius is used to add points to a line which have the same number as the line itself. The search radius must be between 0.00 and 5.00 metres.

Renumber?: If this option is selected (default), the coverages to be converted will be renumbered consecutively, starting at one.

OK: Accept the coverages and settings selected and open the output directory window.

Cancel: Do not make any changes and close the menu.

Help: This screen.



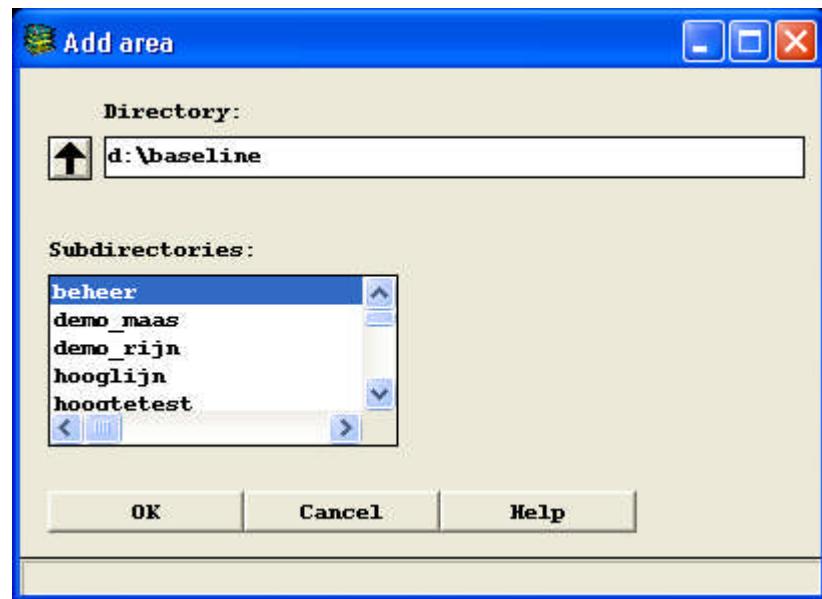
#### Coverages for the conversion of lines and points

Use this window to select input coverages for the conversion of lines and points.

Directory:	Enter the required directory or select it in the 'Subdirectories' list box.
'Arrow Up':	Move up one directory.
Subdirectories:	Subdirectories of the current directory. Choosing a subdirectory will change the current directory.
Coverages:	Available coverages in the current directory.
Add:	Add the selected coverage to the list. If the coverage does not contain the correct features and/or items, you will be notified and the coverage will not be added to the list.
Selected files:	Gives an overview of all coverages selected so far.
Delete:	Highlight a coverage in the list and next click this button to delete it.
Delete all:	The selected coverages list will be emptied. No coverages are selected anymore.
OK:	Accept the selected coverage(s). You are returned to the previous window.
Cancel:	Do not make any changes and close the menu.
Help:	This screen.

## 7.8 Adding

### 7.8.1 Add area



#### Add area

---

The user may add a new workspace for a new area.

The workspace can only be added to the main Baseline directory.

The following workspace is created: <name of area>

'Arrow Up': Move up one directory.

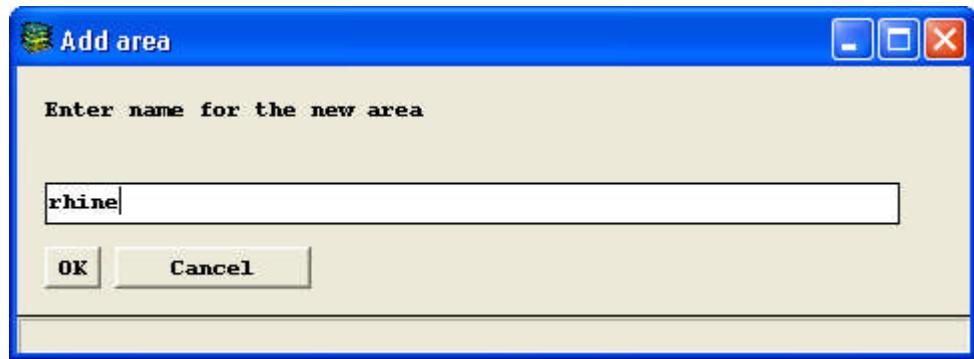
Directory: This input field shows the current path.

Subdirectories: Select the directory to which the new workspace is to be added. Choosing a subdirectory will change the 'Directory'.

OK: The new workspace is added.  
Enter the name of the workspace (area name) in the dialog box.

Cancel: The workspace is not added.

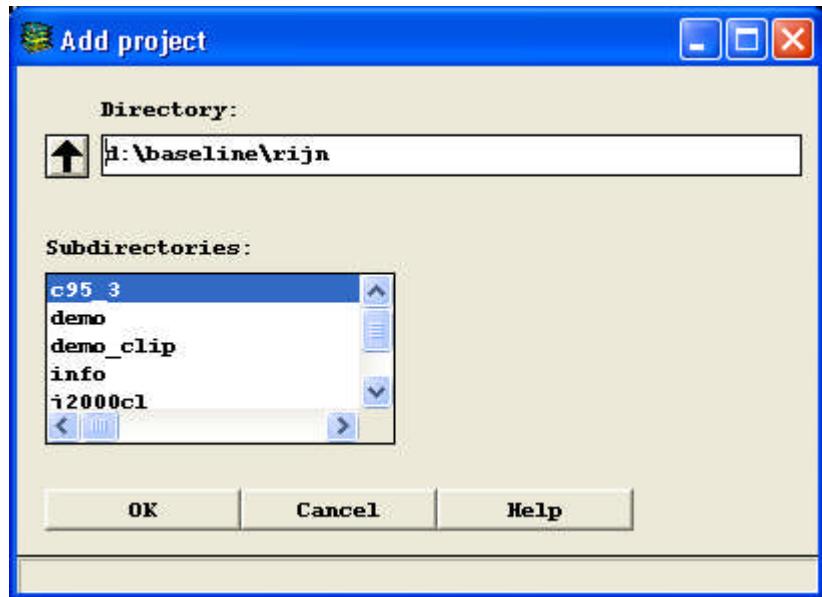
Help: This screen.



OK: The new workspace is added.

Cancel: The new workspace is not added.

## 7.8.2 Add project



### Add project

---

The user may add a new project directory structure.

Projects can only be added to the following directories:

\$RIVGEV/project/rhine

\$RIVGEV/project/meuse

\$RIVGEV/gebruikers/[username]/rhine

\$RIVGEV/gebruikers/[username]/meuse

The following directories are created:

data

export

grenzen

hoogpunt

hooglijn

import

meetpunt

metainfo

oppwater

overig

plot

rivgeom

ruwheid

sobek

tin

waqua

'Arrow Up': Move up one directory.

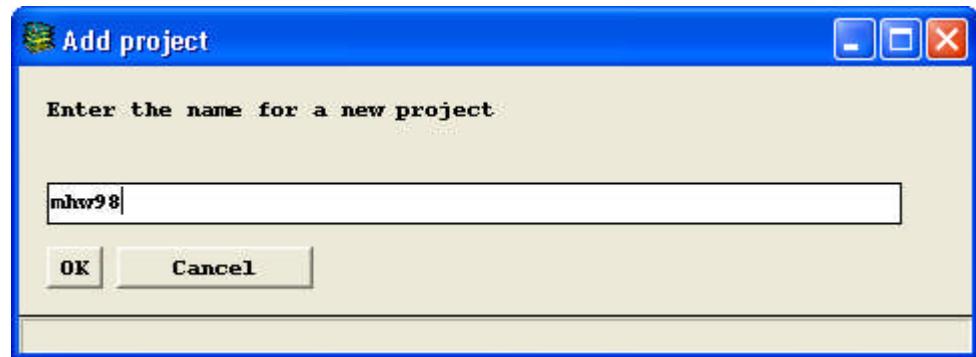
Directory: This input field shows the current path.

Subdirectories: Select the directory to which the new project directory is to be added. Choosing a subdirectory will change the 'Directory'.

OK: The new project is added.  
Enter the name of the new project in the dialog box.

Cancel: The project is not added.

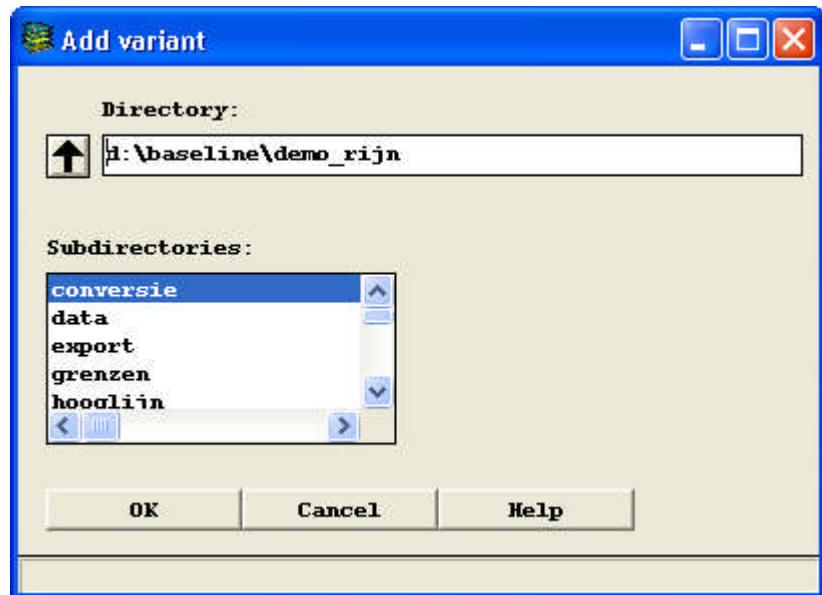
Help: This screen.



OK: The new project is added.

Cancel: The project is not added.

### 7.8.3 Add variant



#### Add variant

The administrator may add a new variant.

Variants can only be added to the following directories:

\$RIVGEV/variant/rhine  
\$RIVGEV/variant/meuse

The following directories are created:

data  
grenzen  
hooglijn  
hoogpunt  
meetpunt  
oppwater  
overig  
rivgeom  
ruwheid  
sobek  
tin  
waqua

'Arrow Up': Move up one directory.

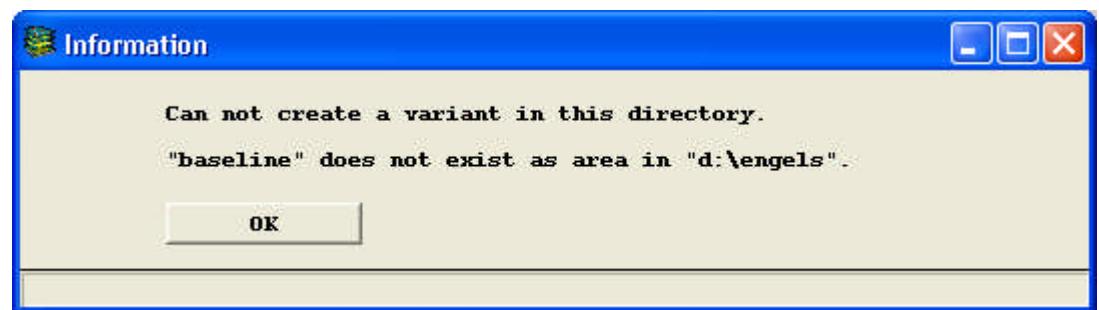
Directory: This input field shows the current path.

Subdirectories: Select the directory to which the new variant is to be added. Choosing a subdirectory will change the 'Directory'.

OK: The new variant is added.  
Enter the name of the new variant in the dialog box.

Cancel: The variant is not added.

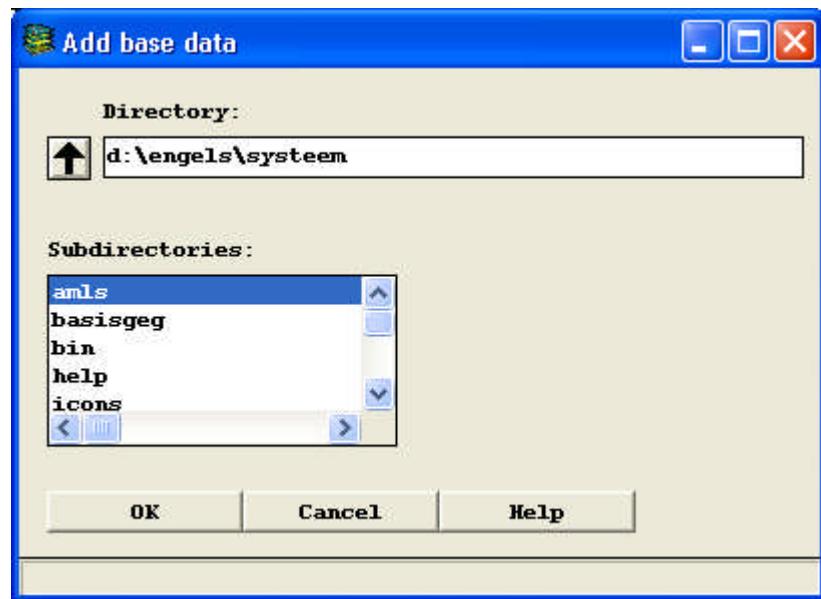
Help: This screen.



OK: The new variant is added.

Cancel: The new variant is not added.

#### 7.8.4 Add basic coverage



##### Add base data

---

The administrator may add a new directory structure for basic coverages.  
This directory can only be added to the basic data directory.

The following directories are created:

data  
grenzen  
hooglijn  
hoogpunt  
meetpunt  
oppwater  
overig  
rivgeom  
ruwheid  
sobek  
tin  
waqua

'Arrow Up': Move up one directory.

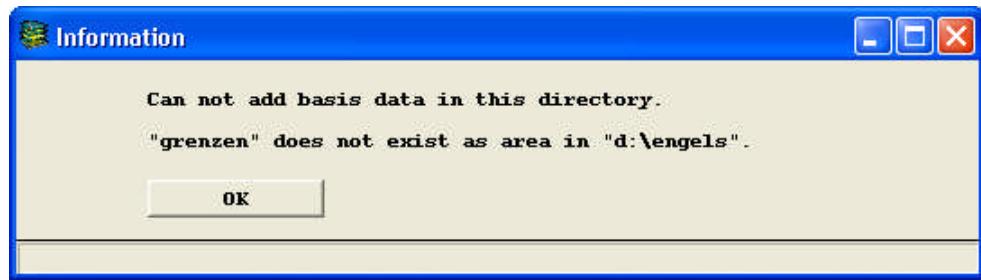
Directory: This input field shows the current path.

Subdirectories: Select the directory to which the new basic coverage directory is to be added. Choosing a subdirectory will change the 'Directory'.

OK: The new basic coverage directory is added.  
Enter the name of the new project in the dialog box.

Cancel: The basic coverage directory is not added.

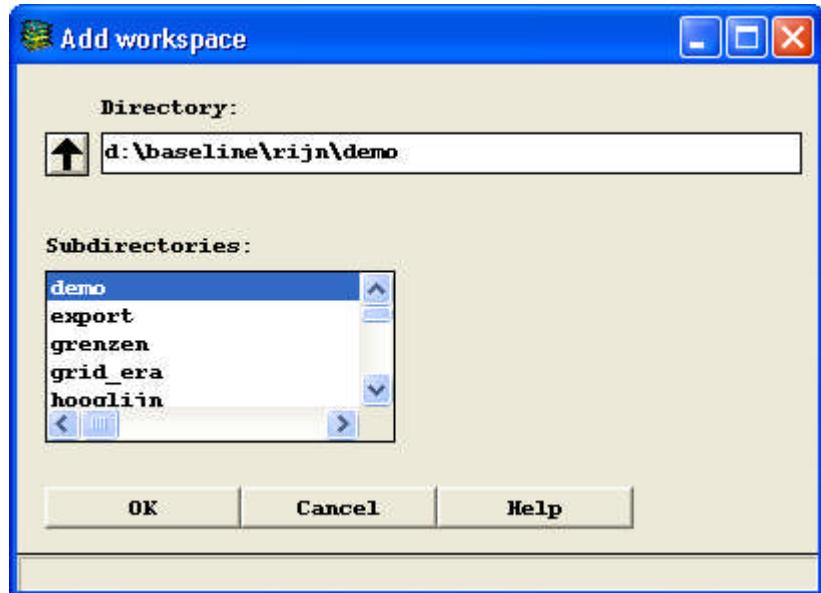
Help: This screen.



OK: The new basic coverage directory is added.

Cancel: The new basic coverage directory is not added.

### 7.8.5 Add workspace



#### Add workspace

The user may add a new workspace.

'Arrow Up': Move up one directory.

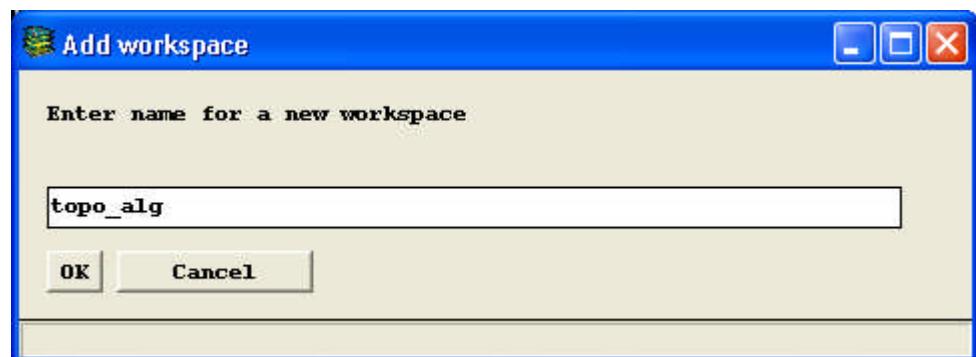
Directory: This input field shows the current path.

Subdirectories: Select the directory to which the new workspace is to be added. Choosing a subdirectory will change the 'Directory'.

OK: Enter the name of the new workspace in the dialog box. Upon confirmation (OK), the new workspace is added.

Cancel: The workspace is not added.

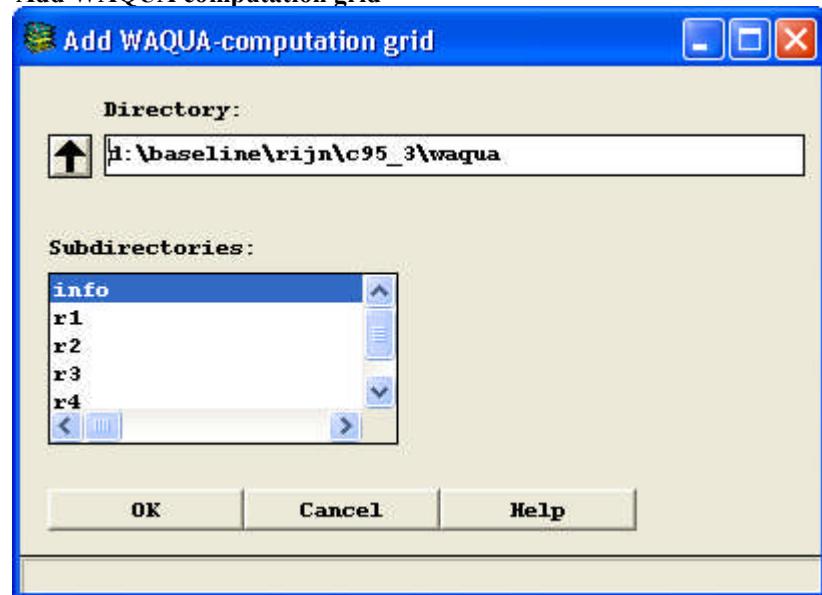
Help: This screen.



OK: The new workspace is added.

Cancel: The new workspace is not added.

### 7.8.6 Add WAQUA computation grid



#### Add WAQUA computation grid

---

The user may create new WAQUA computation grids in a directory whose name ends in /waqua.

The following directories are created:

"grid name"

"grid name"/rooster

It is possible to create more than one computation grid per /waqua directory.

'Arrow Up': Move up one directory.

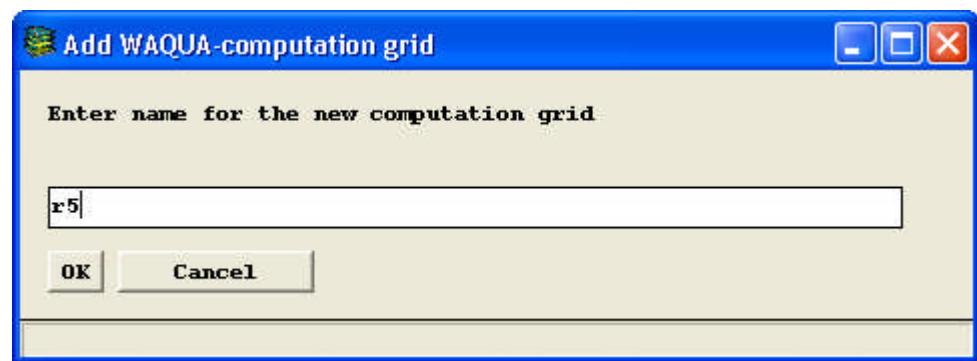
Directory: This input field shows the current path.

Subdirectories: Select the directory to which the new computation grid is to be added. Choosing a subdirectory will change the 'Directory'.

OK: Enter the name of the new computation grid in the dialog box. Upon confirmation (OK), the new grid is added.

Cancel: The computation grid(s) is (are) not added.

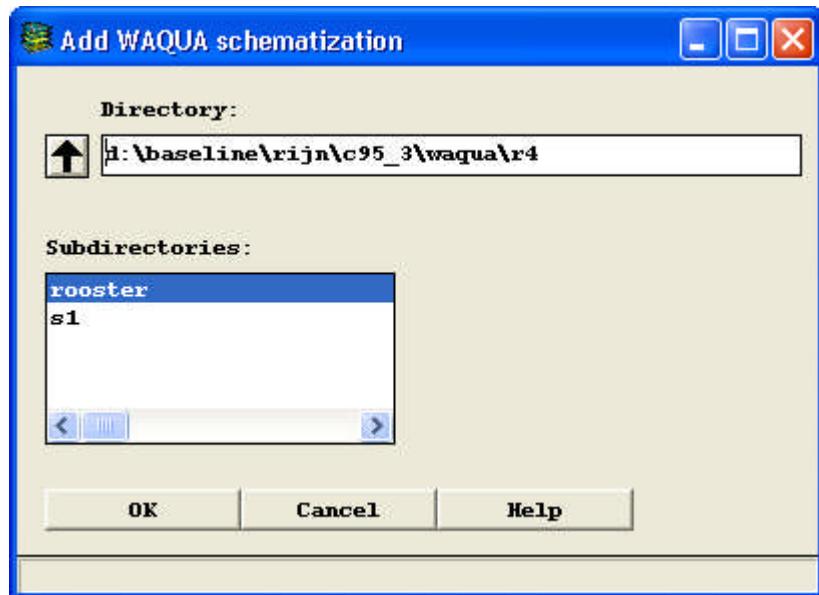
Help: This screen.



OK: The new grid is added.

Cancel: The computation grid(s) is (are) not added.

### 7.8.7 Add WAQUA schematization



#### Add WAQUA schematization

The user may create new WAQUA schematizations in a WAQUA computation grid.

The following directories are created:

"schematization name"  
"schematization name"/ berekening  
bodem  
initieel  
invoer \*  
locaties  
overlaten  
randen  
ruwheid  
schotjes  
uitvoer \*

\* = ArcInfo workspace

It is possible to create more than one schematization per WAQUA computation grid.

'Arrow Up': Move up one directory.

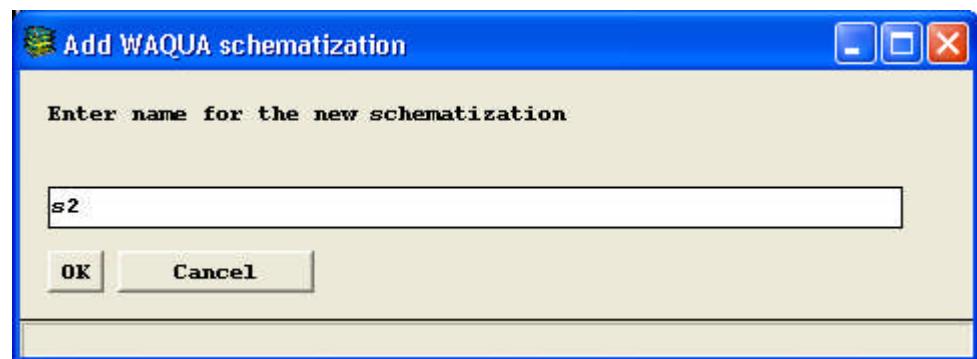
Directory: This input field shows the current path.

Subdirectories: Select the directory to which the new schematization is to be added.  
Choosing a subdirectory will change the 'Directory'.

OK: Enter the name of the new schematization in the dialog box. Upon confirmation (OK), the new grid is added.

Cancel: The schematization(s) is (are) not added.

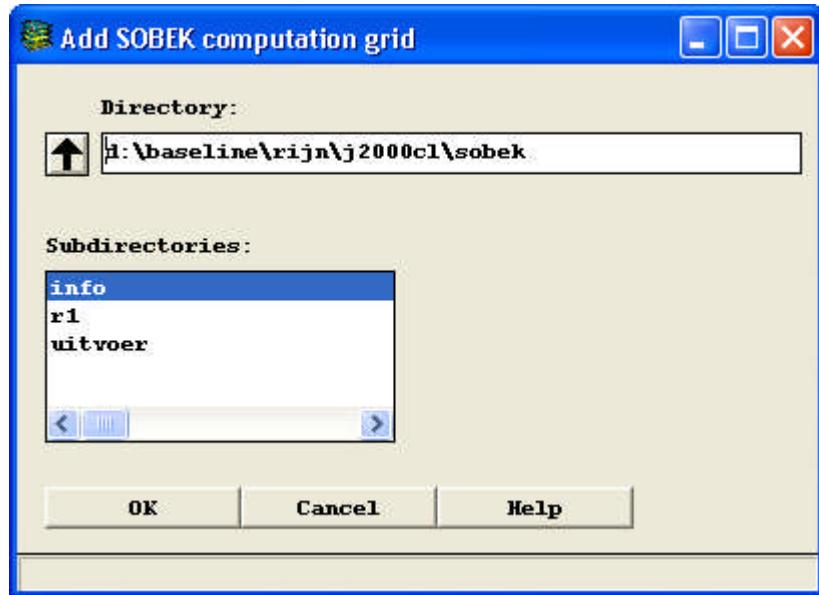
Help: This screen.



OK: The new schematization is added.

Cancel: The new schematization is not added.

### 7.8.8 Add SOBEK computation grid



#### Add SOBEK computation grid

The user may create new SOBEK computation grids in a directory whose name ends in /sobek.

The following directory is created:

<computation grid name>

It is possible to create more than one computation grid per /sobek directory.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Select the directory to which the new computation grid is to be added. Choosing a subdirectory will change the 'Directory'.

OK: Enter the name of the new computation grid in the dialog box. Upon confirmation (OK), the new computation grid is added.

Cancel: The computation grid(s) is (are) not added.

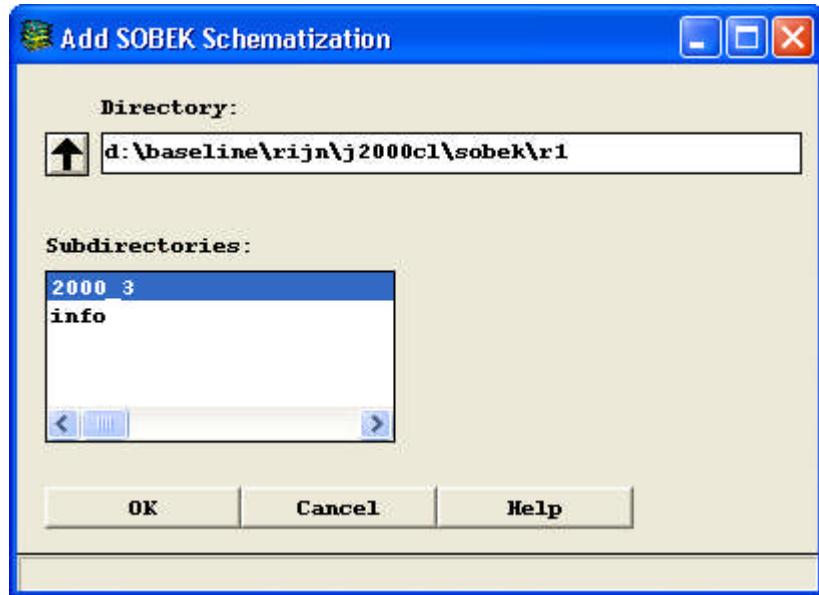
Help: This screen.



OK: The new computation grid is added.

Cancel: The new computation grid is added.

## 7.8.9 Add SOBEK schematization



### Add SOBEK schematization

The user may create new SOBEK schematizations in a SOBEK computation grid.

The following directories are created:

"schematization name"  
"schematization name"/ basis \*  
    invoer/ascii  
    invoer/grid \*  
    uitvoer/divers \*  
    uitvoer/profielen

\* = ArcInfo workspace

the contents of the workspaces and directories are:

basis: SOBEK basic files:  
    vakgrenzen (compartments)  
    stroomvoering (flow conveyance)  
    kadesegmenten (summer dike segments)  
    kades (summer dikes)  
    plassen (lakes)  
    ruwheden (roughness elements)  
ascii: SOBEK ASCII input files:  
    <file with compartment numbers and administrative data>  
    <file with compartment numbers and compartment lengths>  
grid: SOBEK input grids:  
    <grid with sections>  
    2x <grid with compartment boundaries>  
    3x <grid with lakes>  
    2x <grid with summer dikes>  
    <grid with flow conveyance>  
    2x <grid with bed elevation>  
profiles: ASCII profile files  
miscellaneous: other SOBEK output

It is possible to create more than one schematization per SOBEK computation grid.

'Arrow Up': Move up one directory.

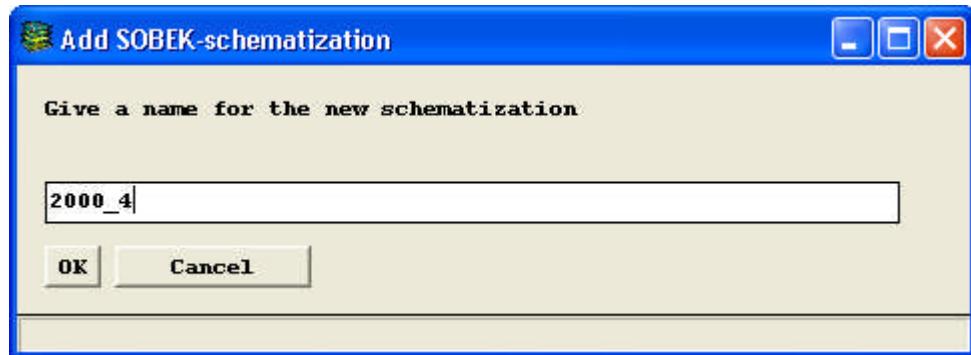
Directory: This input field shows the current path.

Subdirectories: Select the directory to which the new schematization is to be added. Choosing a subdirectory will change the 'Directory'.

OK: Enter the name of the new schematization in the dialog box. Upon confirmation (OK), the new schematization structure is added.

Cancel: The schematization(s) is (are) not added.

Help: This screen.

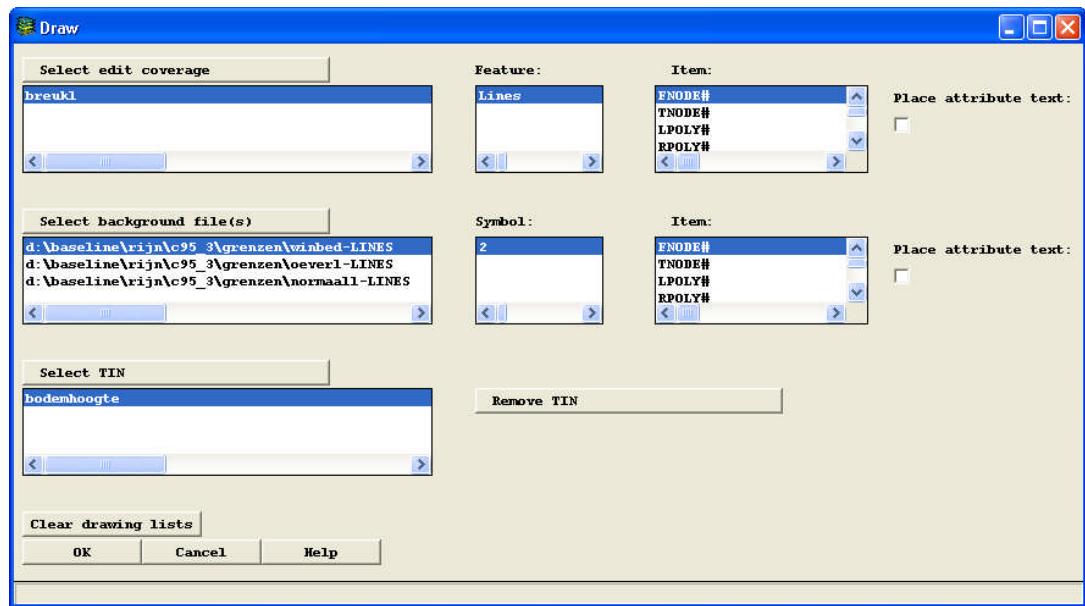


OK: The new schematization is added.

Cancel: The new schematization is not added.

## 8 Consultation/Selection

### 8.1 Drawing



#### Draw

Use this window to set the working environment.

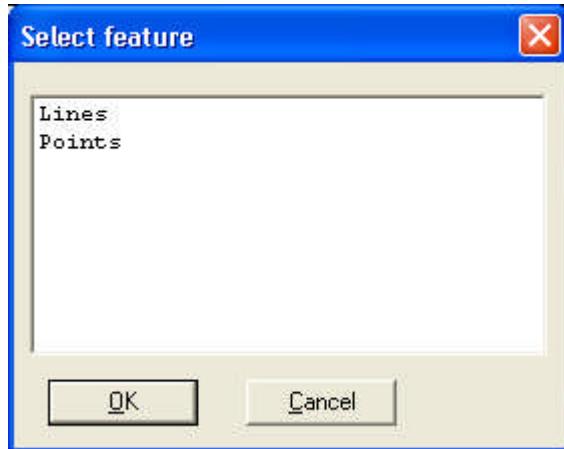
Files and elements must be drawn before being able to view and select them. You can only view or select one file at a time. This file is called an edit coverage (working coverage). Selection of an edit coverage is compulsory.

You can select several files which are drawn as background coverages.

The user can select the coverages to serve as edit coverage and background coverage. The user can also select a TIN.

Select edit coverage:      Select an edit coverage in the list. Use this coverage for selections and modifications.  
The selected edit coverage will be displayed in the list.

Feature:      This list box shows the selected feature type of the edit coverage. Click on the feature of the selected edit coverage to open a window in which you can select a new editing feature:

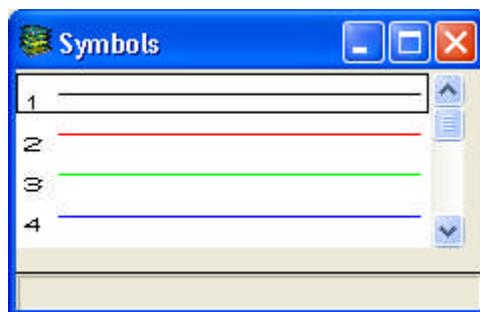


Attribute: The available attributes of the feature selected.

Attribute text(s): Select an edit coverage attribute item to draw. By default, the top item will be drawn.

Select background file(s): Select one or more background coverages in the list. The selected background coverages will be displayed in the list. Lines, polygons or points can be drawn from background coverages. Go to "Features" in the "Select background coverage(s)" window to select them.

Symbol: Click on the symbol of the selected background coverage to open a window in which you can select the graphical presentation symbol (e.g. line colour).



#### Layout for FILE: Feature

---

Symbol: Select the (line or point) symbol in this field for drawing the background coverage selected.

Attribute text(s): Select an attribute item of the selected background coverage for display.  
PLEASE NOTE: if no attribute item is selected, you will be notified.  
Click on 'OK' to close the window; the graphical window is drawn once again.

Select TIN: Select a TIN in the list.

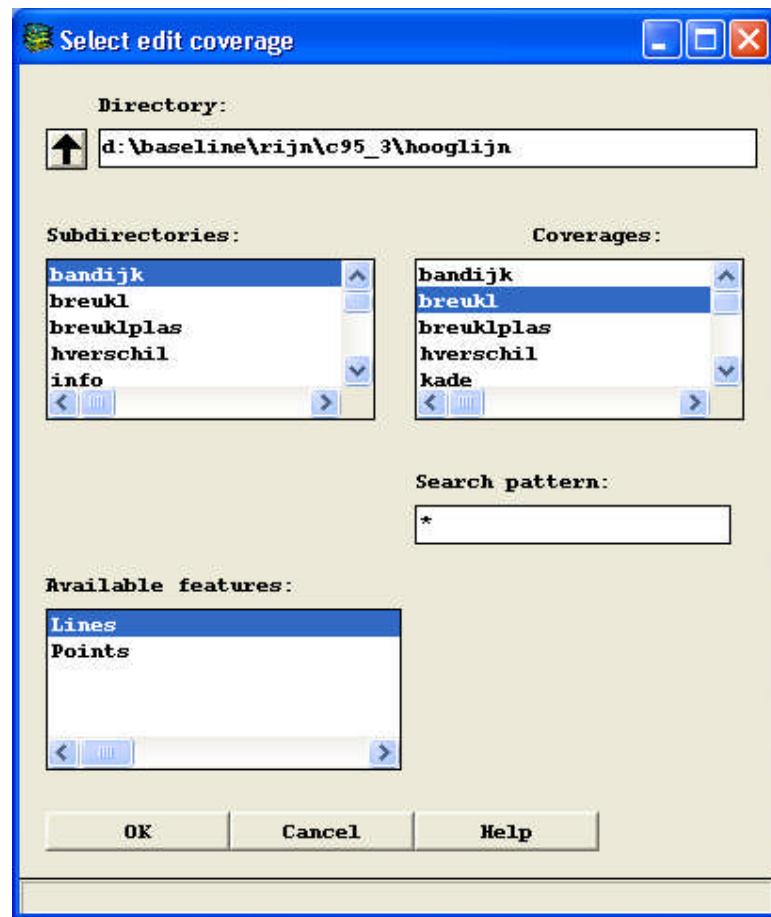
Remove TIN: Remove selected TIN.

Clear: Remove all files (edit coverage, background coverage(s) and tin file) from the lists. The graphical window is drawn once again.

OK: The selected files are drawn.

Cancel: Do not make any changes and close the window. The graphical window is drawn once again.

Help: This screen.



### Select edit coverage

Select an edit coverage to draw, to view or to make selections.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

Cov...: Select a coverage to serve as edit coverage.

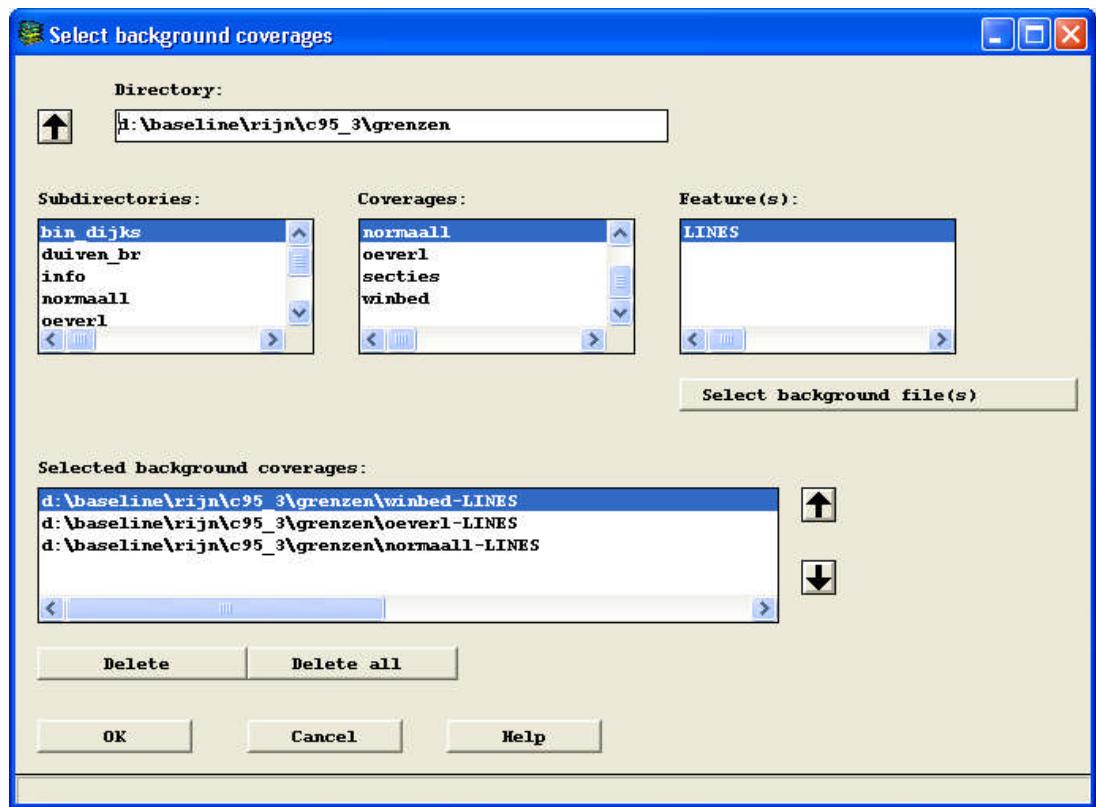
Search pattern: Enter one or more letters to make a selection from the coverages shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

Available features: Shows the available features (line/poly/point) of the coverage selected. Select the required feature for selections.

OK: The selected coverage with the selected feature is used as edit coverage.

Cancel: Return to previous window.

Help: This screen.



### Select background coverages

Select one or more coverages to serve as background coverages. The upper background coverage in the list will be drawn last.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

Coverages: Select one coverage to serve as background coverage.

Features: Shows the available features (line/poly/point) of the coverage selected.  
Select the required feature to be drawn.

Add: The selected coverage with the selected feature is added to the list of selected background coverages.

#### Selected background coverages:

List of all the selected background coverages.

NB: Use the arrows on the right-hand side to change the order in which the background coverages are drawn.

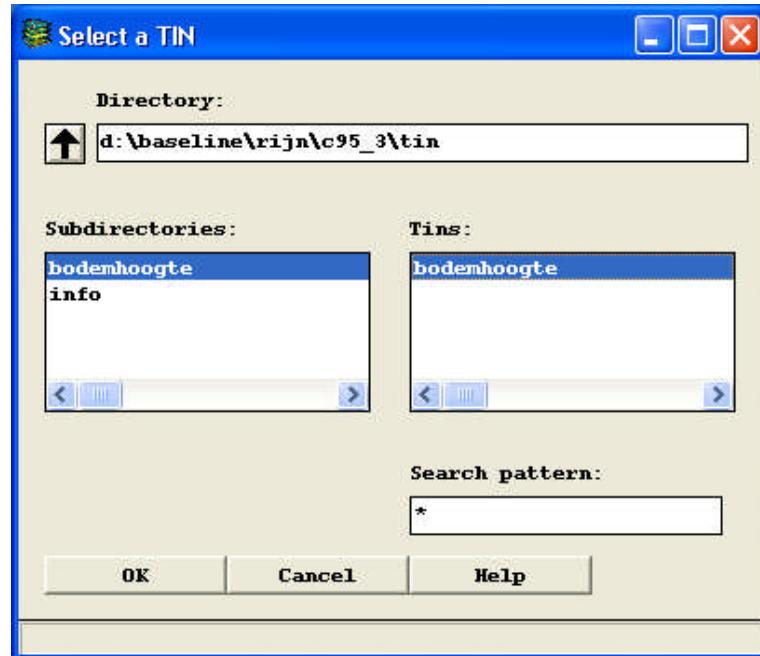
Delete: The selected file is removed from the list.

Delete all: All files are removed from the list.

OK: The selected background coverages will be included.

Cancel: Return to previous window.

Help: This screen.



### Select a TIN

---

Select a TIN to draw.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Summary of available subdirectories in current directory.

Tins: Select the TIN to be drawn.

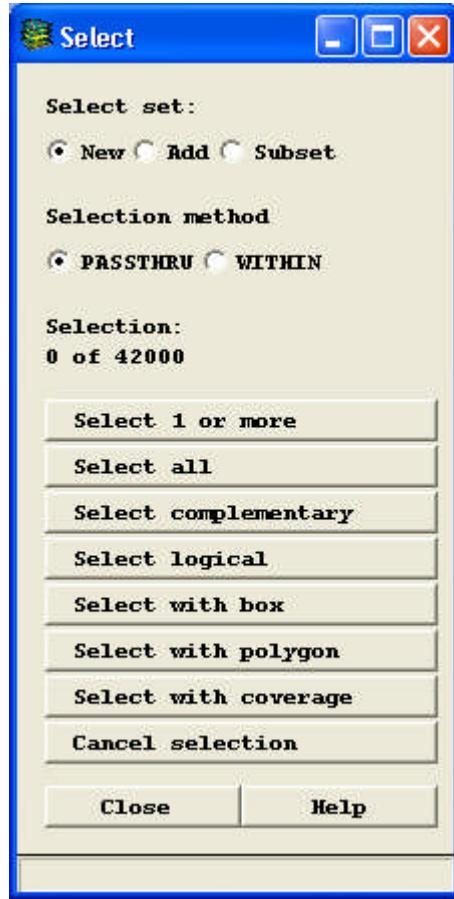
Search pattern: Enter one or more letters to make a selection from the TINs shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter.

OK: The TIN is selected.

Cancel: Return to previous window.

Help: This screen.

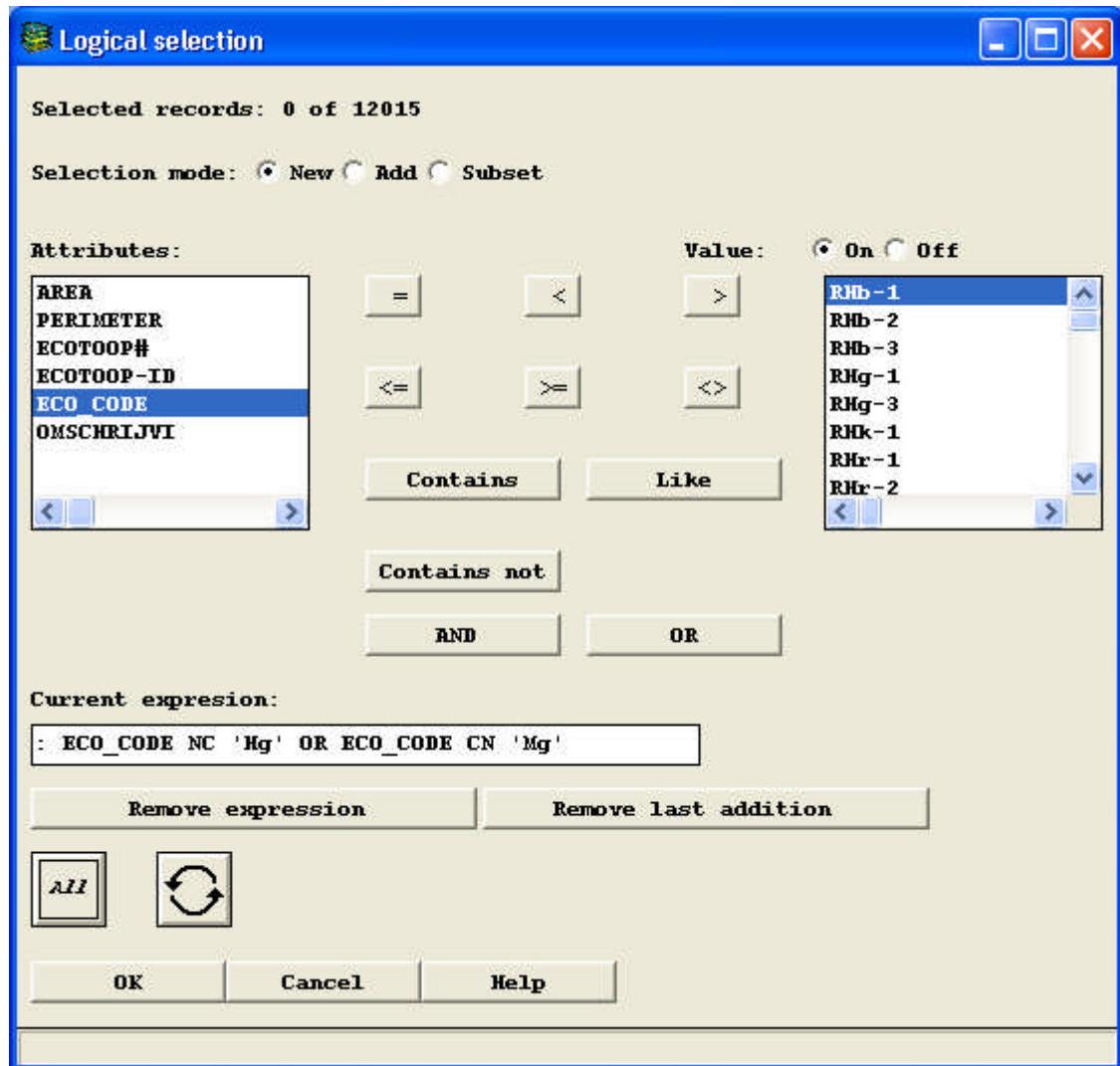
## 8.2 Selecting



### Select

Select set:	Choose one of the following three selection methods: - New: This creates a completely new selection set.
- Add:	A new selection is or may be added to an existing one. The result is larger than or equal to the existing selection.
- Subset:	A new selection is removed from an existing one. The result is smaller than or equal to the existing selection.
Selection method:	Choose one of the following two selection methods: - Passthru: A candidate element is not required to entirely match a specified selection box or file in order to be selected.
- Within:	A candidate element is required to entirely match a specified selection box or file in order to be selected.
Selected:	A value displaying the number of elements selected.
Select 1 or more:	One or more elements may be selected. Finish the selection by means of <Ctrl> + right mouse button (key 9).
Select all:	Everything in the edit coverage is selected.
Select complementary:	The selection is reversed. Selected elements are no longer selected; non-selected elements are selected.

Select logical:	The selection is made on the basis of attribute values. Clicking this button will open a new window with logical selection options.
Select with box:	Use a rectangular frame to select an area. Line elements are selected subject to the selection method chosen. Click this button and use the mouse to draw the rectangle.
Select with polygon:	Use a polygon to select an area. After having drawn the polygon, close this window by means of <Ctrl> + right mouse button (key 9).
Select with coverage:	Use a previously saved file to make a selection in the edit coverage. A number of line elements is selected, subject to the selection method chosen. All line elements in the file are selected.
Cancel selection:	The selection will be cancelled.
Close:	The menu is closed. Any existing selections remain intact. The selection can be cancelled using the Cancel button in the Consultation/Selection menu.
Help:	This screen.



## Logical selection

Select records on the basis of attribute selection.

Selected records: The total number of records matching the selection.

Selection mode: Choose one of the three selection methods:

- New: A completely new selection.
- Add: Add the specified selection to the existing selection.
- Subset: Make the specified selection from the existing selection.

Attributes: Select one of the available attributes to compile the selection set.

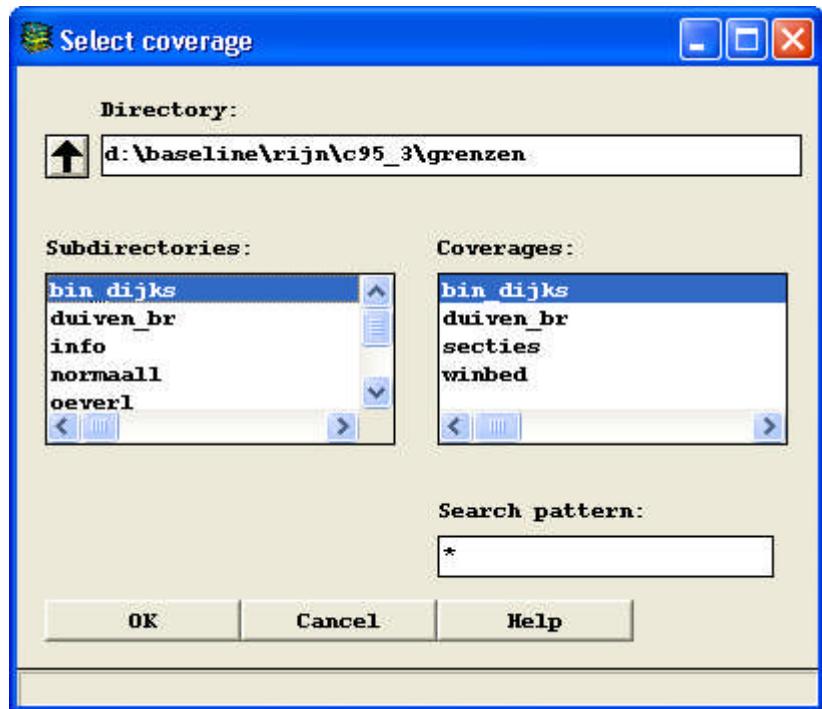
Value (On/Off): Enable/disable the display of a unique attribute value list.

Logical operators:

\*\*\* only for numbers (not quotation marks):

=	is equal to	(e.g. RUW_CODE = 401)
>	greater than	
<	smaller than	
>=	greater than or equal to	
<=	smaller than or equal to	
<>	unequal to	





### Select coverage

---

Use this window to select a coverage for the previous page.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Coverages: Available coverages in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

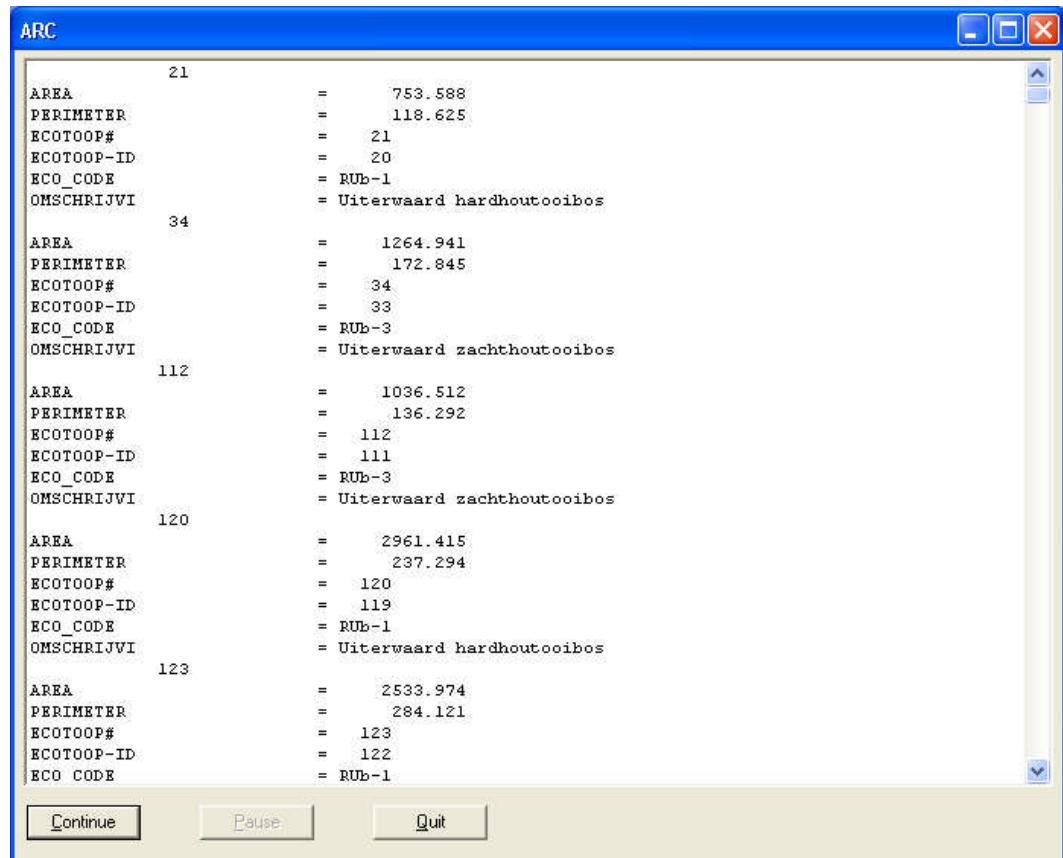
OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

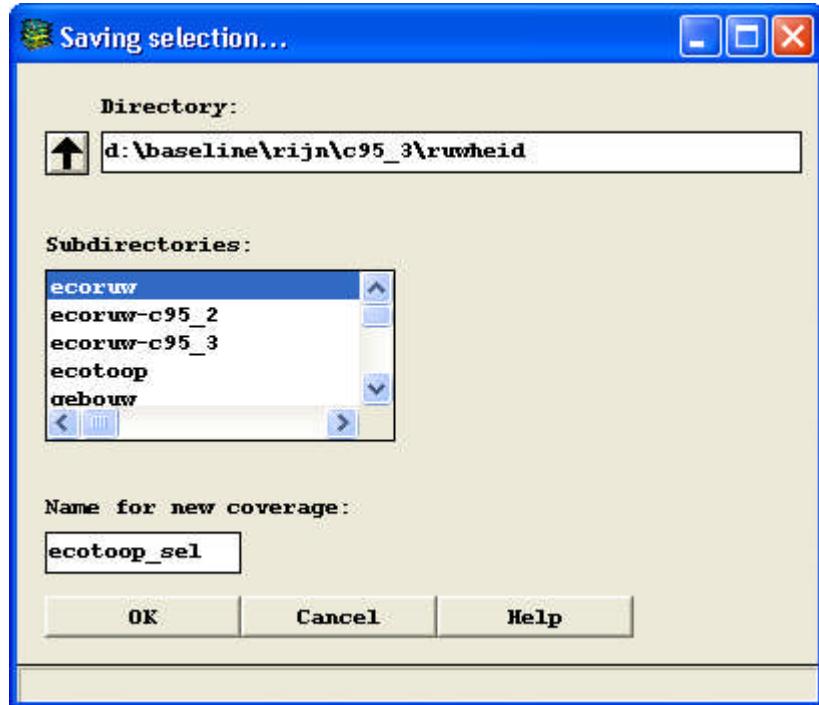
Help: This screen.

### 8.3 Attributes

A popup window displays the attribute data of the selected edit coverage objects. To display attribute data, at least 1 object must be selected. Click the QUIT button to close the window.



## 8.4 Save selection



### Save selection...

In case of a selection, the elements selected can be saved in a new coverage. Use this function, for instance, if you do not want to work with all elements from a file but only with specific elements, such as dikes exceeding a specified crown height.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Select the subdirectory in which the selection is to be saved. The path indicated at 'Directory' will be adjusted.

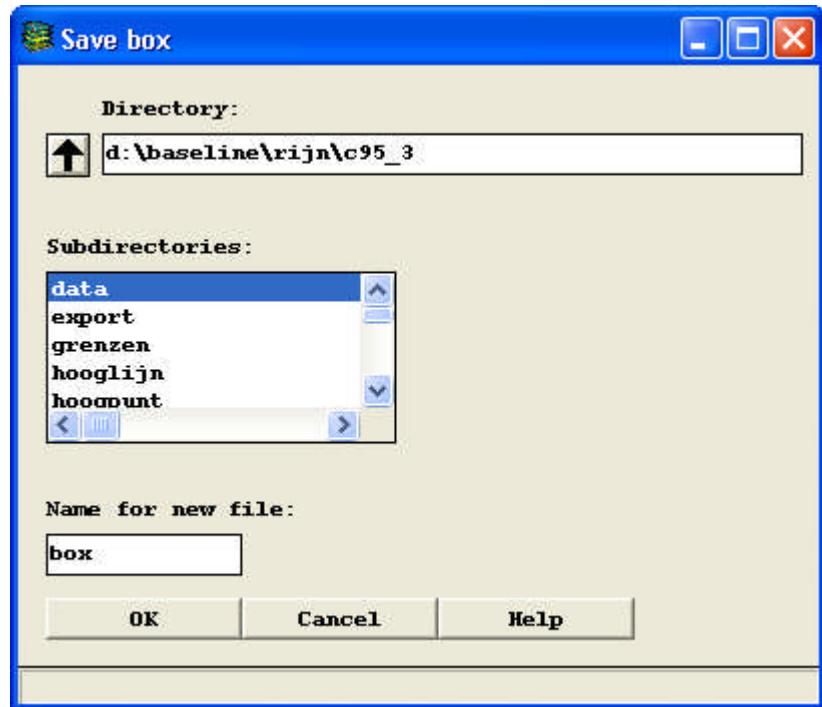
Name for new file: Enter the name of the selection saved.

OK: The selection is saved in the coverage indicated.

Cancel: The selection is not saved. The window is closed.

Help: This screen.

## 8.5 Create contour: Box



### Save box

---

Enter and save the coverage path and name before drawing a box.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Select the subdirectory in which the selection box is to be saved. The path indicated at 'Directory' will be adjusted.

Name for new file: Enter the name under which the selection box is to be saved.

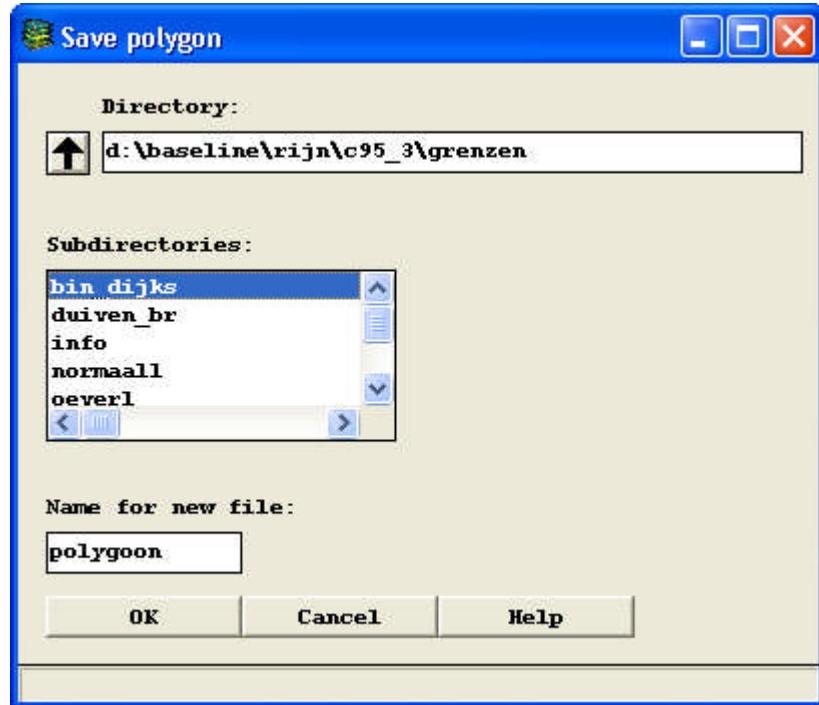
OK: The box is saved in the coverage indicated. The selection made last will remain intact after closing the window.

Cancel: The box is not saved. The menu is closed.

Help: This screen.

Use the mouse to draw the box. Click the left mouse button. Click the left mouse button again to immediately save the box as coverage.

## 8.6 Create contour: Polygon



### Save polygon

Enter coverage path and name before drawing a polygon.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Select the subdirectory in which the polygon is to be saved. The path indicated at 'Directory' will be adjusted.

Name for new file: Enter the name of the polygon saved.

OK: The polygon is saved in the coverage indicated. The selection made last will remain intact after closing the window.

Cancel: The polygon is not saved. The menu is closed.

Help: This screen.

Digitalize the polygon by following the instructions below:

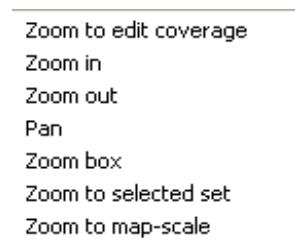
-----Options-----

1) Add polygon	2) Polygon end	4) Remove the point added last
5) Remove the polygon added last	8) Digitalize options	9) Stop

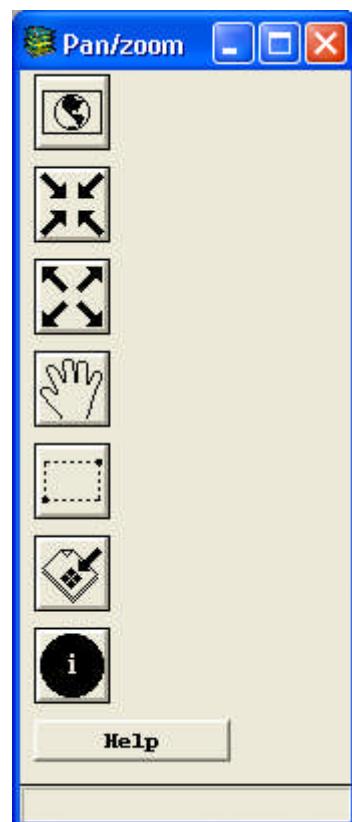
## 9 Pan/Zoom

There are two ways to select pan/zoom functions:

1. The Pan/zoom window can be selected via the main window and displays a number of functions to navigate the graphical window. zooming, panning.



2. After drawing an edit/update coverage, the pan/zoom window will be opened.



### Pan/zoom

Right-click the icon to display its function at the bottom of the screen.



Zoom edit coverage: Display the entire edit coverage.



Zoom in:

Zoom in on the centre indicated. This is a recurring function, which allows for repetitive zooming after each action. Click the right mouse button to cancel this function (key 9).



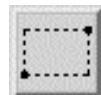
Zoom out:

Zoom out on the centre indicated. This is a recurring function, which allows for repetitive zooming after each action. Click the right mouse button to cancel this function (key 9).



Pan:

Move the working map versus the centre indicated. This is a recurring function, which allows for repetitive panning after each action. Click the right mouse button to cancel this function (key 9).



Zoom rectangle:

Zoom in on a rectangle. Specify the top left-hand corner and the bottom right-hand corner.



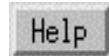
Zoom selection:

Zoom the selected part of the edit coverage.



Identify:

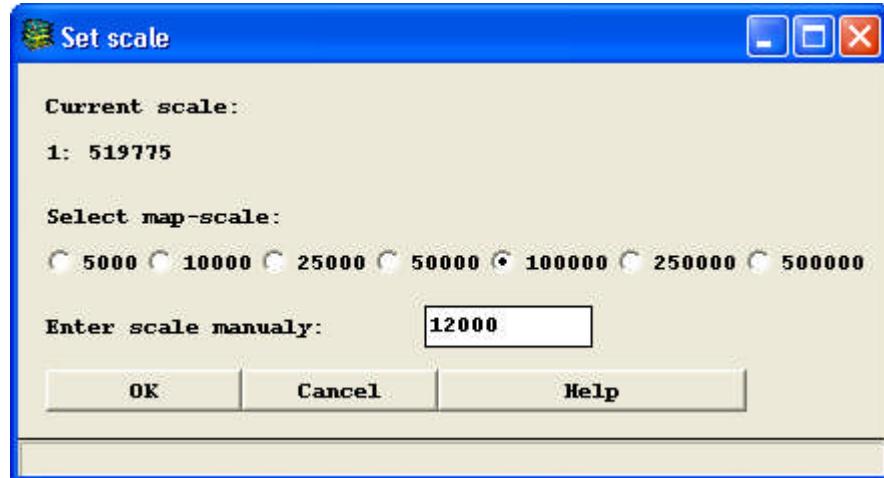
Identification of map elements. Select one or more elements and press <Ctrl> and click the right mouse button (key 9) to accept the selection. The attribute information of the selected map elements will be displayed. Terminate the Select option by depressing <Ctrl> and the right mouse button (key 9). Do not select any element.



Help: This screen.

Click the icon in the extreme left of the title bar to close the menu.

## Zooming scale



### Set scale

---

Current scale: The map scale at the time the current window was opened.

Select map-scale: The user has the choice of seven scale levels  
5000  
10000  
25000  
50000  
100000  
250000  
500000

Apart from the above mentioned seven scale levels, the user may also set any scale level manually.

Setting the scale number to 0 means the map will be drawn again.

OK: Click OK to use the selected scale for a new drawing process.

Cancel: The menu is closed.

Help: This screen.

## 10 Changing

### 10.1 Draw

This menu is identical to the Consultation/Selection: Drawing menu (see paragraph 8.1).

### 10.2 Spatial

After drawing an edit coverage, the objects can be spatially changed. An edit selection window will be opened, subject to the type of objects chosen (polygons, points or lines).

#### 10.2.1 Polygons



#### Edit polygons

---

**Add:** Click this button to add polygons.  
Use the left mouse button to indicate both the starting point and the intermediate points of the polygon.  
Finish the polygon by means of the middle mouse button (key 2).  
Remove the point added last by means of <Shift> and the left mouse button (key 4).  
While drawing, remove the entire polygon by means of <Shift> and the middle mouse button (key 5).  
Terminate the Add option by depressing <Ctrl> and the right mouse button (key 9).

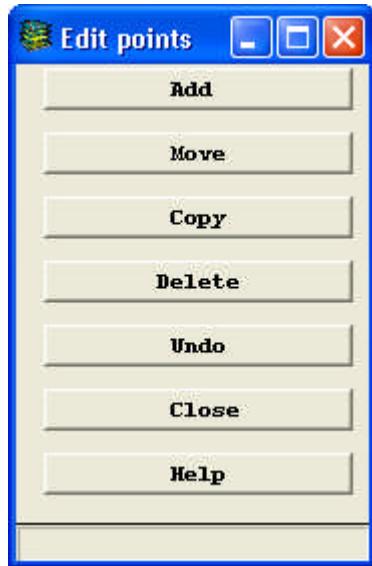
**Delete:** Click this button to delete polygons.  
- Upon selection of at least one polygon, the selection is deleted.  
- If no polygon is selected, the cursor changes to a circle. Click the left mouse button to select an element. Repeat this action to select more polygons.  
Terminate the Select option by depressing <Ctrl> and the right mouse button (key 9). The selection is subsequently deleted.

**Undo:** Undo the last edit operation.

**Close:** Close the Edit window.

**Help:** This screen.

## 10.2.2 Points



### Edit points

---

**Add:** Click this button to add a point.  
- Add points by means of the left mouse button.  
- Remove the point added last by means of <Shift> and the middle mouse button (key 5).  
- Terminate the Add option by depressing <Ctrl> and the right mouse button (key 9).

**Move:** Click this button to move a point.  
- Upon selection of at least one point, the cursor changes to a hand. Hold down the left mouse button to move all points selected.  
- If no point is selected, the cursor changes to a circle. Click the left mouse button to select an element. Repeat this action to select more points. The point last selected may be removed from the selection by clicking the middle mouse button (key 2). Terminate the Select option by depressing <Ctrl> and the right mouse button (key 9). Next, move the point according to the procedure described above.

**Copy:** Click this button to copy a point.  
- Upon selection of at least one point, the cursor changes to a hand. Hold down the left mouse button to copy all points selected.  
- If no point is selected, the cursor changes to a circle. Click the left mouse button to select an element. Repeat this action to select more points. The point last selected may be removed from the selection by clicking the middle mouse button (key 2). Terminate the Select option by depressing <Ctrl> and the right mouse button (key 9). Next, copy the point according to the procedure described above.

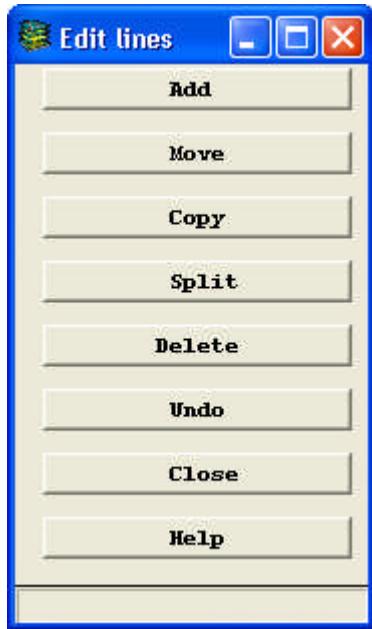
**Delete:** Click this button to delete a point.  
- Upon selection of at least one point, the selection is deleted.  
- If no point is selected, the cursor changes to a circle. Click the left mouse button to select an element. Repeat this action to select more points. The point last selected may be removed from the selection by clicking the middle mouse button (key 2). Terminate the Select option by depressing <Ctrl> and the right mouse button (key 9). The selection is subsequently deleted.

Undo: Undo the last edit operation.

Close: Close the Edit window.

Help: This screen.

### 10.2.3 Lines



#### Edit lines

---

##### Add:

Click this button to add a line element.

- Indicate the starting point of the line with (XTERM: the left mouse button and next use) the middle mouse button (key 2); intermediate points are indicated by the left mouse button (key 1).
- Remove the intermediate point added last by means of <Shift> and the left mouse button (key 4).
- Finish the line by means of the middle mouse button (key 2). Terminate the Add option by depressing <Ctrl> and the right mouse button (key 9).

##### Move:

Click this button to move a line element.

- Upon selection of at least one line, the cursor changes to a hand. Hold down the left mouse button to move all line elements selected.
- If no line is selected, the cursor changes to a circle. Click the left mouse button to select an element.

Repeat this action to select more lines. The line last selected may be removed from the selection by clicking the middle mouse button (key 2). Terminate the Select option by depressing <Ctrl> and the right mouse button (key 9). Next, move the line according to the procedure described above.

##### Copy:

Click this button to copy a line element.

- Upon selection of at least one line, the cursor changes to a hand. Hold down the left mouse button to copy all line elements selected.
- If no line is selected, the cursor changes to a circle. Click the left mouse button to select an element.

Repeat this action to select more lines. The line last selected may be removed from the selection by clicking the middle mouse button (key 2). Terminate the Select option by depressing <Ctrl> and the right mouse button (key 9). Next, copy the line according to the procedure described above.

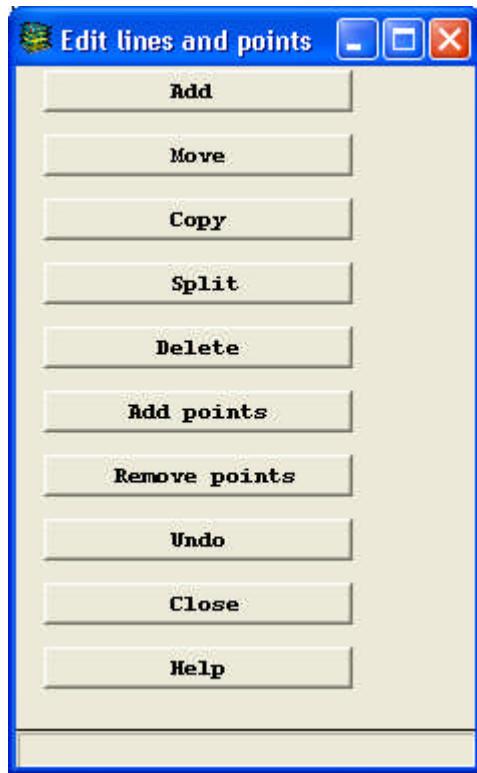
##### Split:

Click this button to split a line element.

- Upon selection of a line, indicate the splitting point of the line by means of the left mouse button.
- If no line is selected, the cursor changes to a circle. Use the left mouse button to select an element and next indicate the point where the line is to be split.

Delete:	<p>Click this button to delete a line element.</p> <ul style="list-style-type: none"><li>- Upon selection of at least one line, the selection is deleted.</li><li>- If no line is selected, the cursor changes to a circle. Click the left mouse button to select an element.</li></ul> <p>Repeat this action to select more lines. The line last selected may be removed from the selection by clicking the middle mouse button (key 2). Terminate the Select option by depressing &lt;Ctrl&gt; and the right mouse button (key 9). The selection is subsequently deleted.</p>
Undo:	Undo the last edit operation.
Close:	Close the Edit window.
Help:	This screen.

#### 10.2.4 Lines with Points



##### Edit lines and points

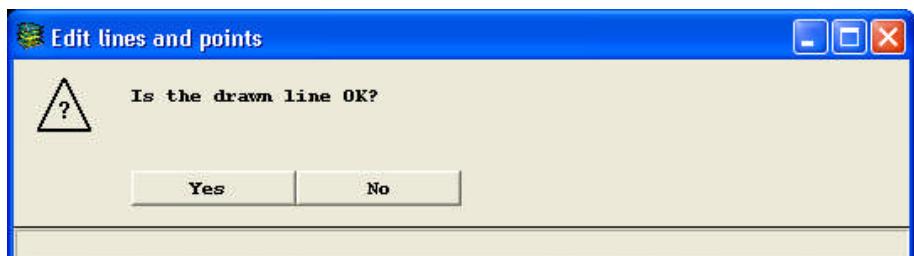
When modifying lines with points, the direction of a line can be visualised by clicking "Edit" and "Spatial", followed by a "Pan/Zoom" operation. This may be very useful when making modifications to elevations to the left or the right of e.g. a summer dike.

Add:

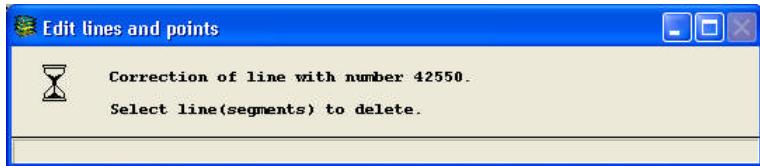
Click this button to add a line and its related points.

- Indicate the starting point of the line with (XTERM: the left mouse button and next use) the middle mouse button (key 2); intermediate points are indicated by the left mouse button (key 1).
- Remove the intermediate point added last by means of <Shift> and the left mouse button (key 4).
- Finish the line by means of key 2.
- Terminate the Add option by depressing <Ctrl> and the right mouse button (key 9).

Finishing the new line by means of key 2 will prompt the question:

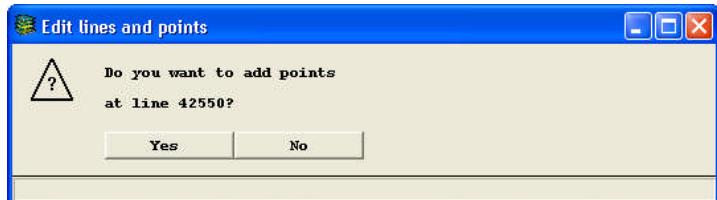


If the answer is "No", the following message appears:

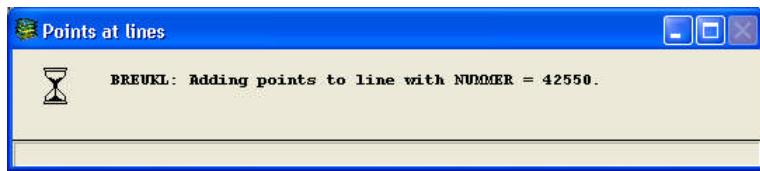


Terminate the Select option by depressing <Ctrl> and the right mouse button (key 9). The selected (newly added) lines will be deleted immediately.

If the answer is "Yes", the following question is posed:



Another "Yes" will automatically start the "Add points" procedure.



This procedure is described in "Add points".

Move:

Click this button to move a line and its related points.

- Upon selection of at least one line, you will be asked to indicate the starting and destination points using the left mouse button. The distance between and direction of these two points determine the relocation of the selected lines and their associated points. Neither the starting point nor the destination point must be on a selected line. Click the point of destination to add to the selection and relocate all line elements with numbers corresponding with the line(s) selected. Subsequently, all related points (with corresponding numbers) are selected and relocated by the same distance and in the same direction.



Copy:

Click this button to copy a line and its related points.

- Upon selection of at least one line, you will be asked to indicate the starting and destination points using the left mouse button. This will determine the distance to and direction of the new location of the lines and points. Selection of (other) line elements and their related points is similar to the Move procedure. The lines and points copied are each given a new unique number.



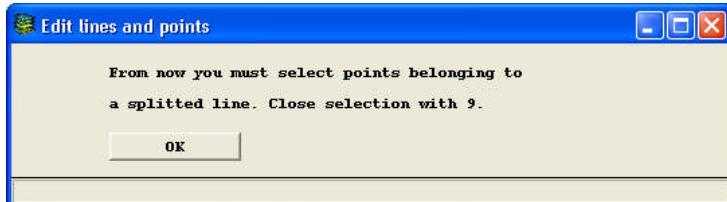
**Split:**

Click this button to split the line and assign a new number to the new line element and its associated points.

- Upon selection of one line, you will be asked to indicate the point where the line is to be split.

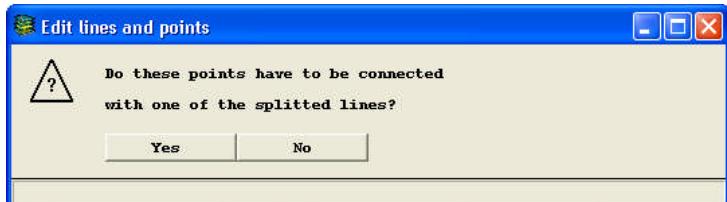


If this point is on or close enough to the line selected, the following message appears:

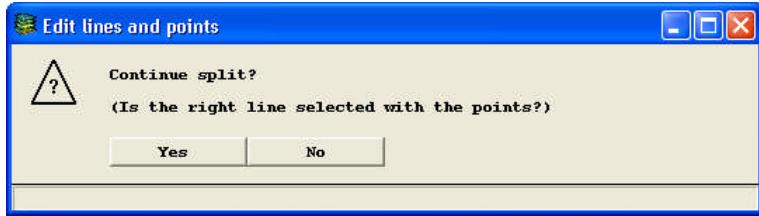


Select all points (at least 3) belonging to that part of the new line that is to be given a new number.

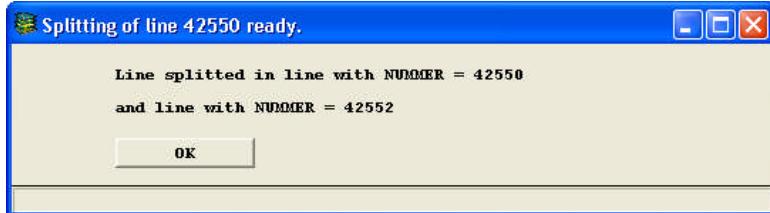
The following question is posed:



If the answer is "Yes", the part closest to those points is selected and the following question is posed:



- A "Yes" will assign a new unique number to the lines and points selected.



**Delete:**

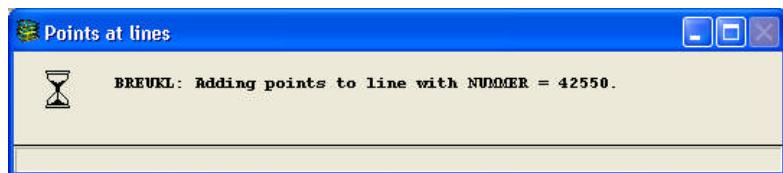
Click this button to delete a line and its related points.

Upon selection of at least one line, the selection is deleted. Any points with the numbers equal to those of the deleted lines will also be deleted.

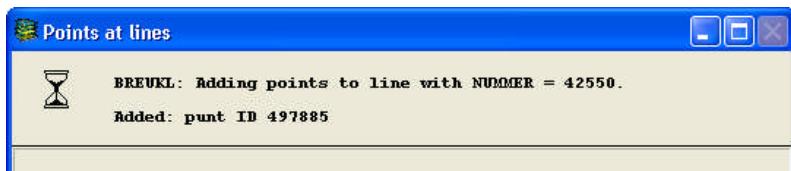
**Add points:** Click this button to add and modify points belonging to lines.

Upon confirmation, this function is also run under "Add".

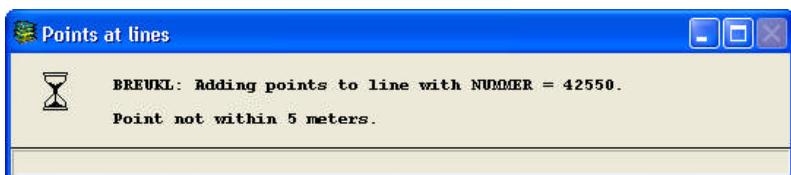
Upon selection of one line, the following message is displayed:



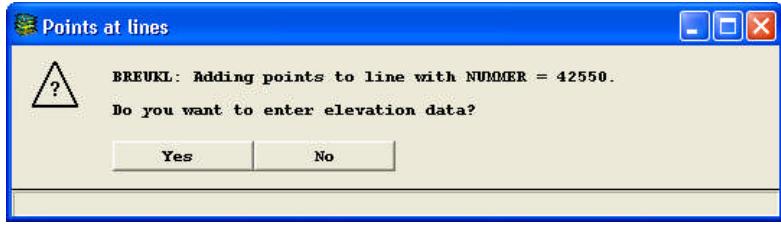
Next, indicate the position of the new point by means of the left mouse button. Correct entry prompts the following message:



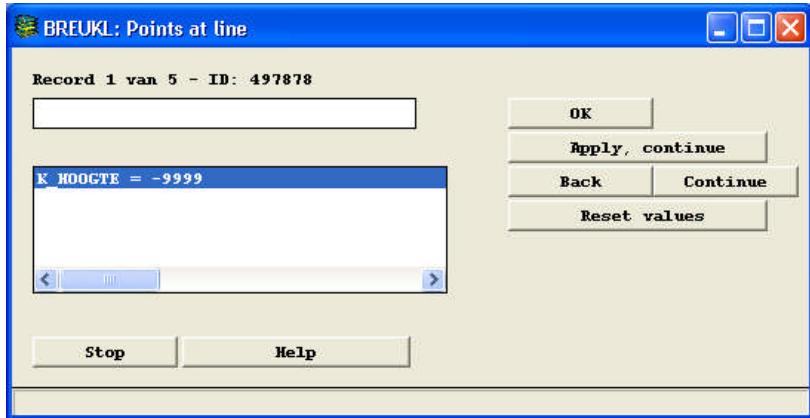
Incorrect entry prompts the following message:



Terminate the Add point option by depressing <Ctrl> and the right mouse button (key 9), which will prompt the following question:



The answer "Yes" will open a new data entry window. The functions in this window are described in the corresponding help screen.



#### Modify data of added points

Use this function to modify the attribute values of the points added to the line. The points added are referred to as "the group of points selected". It is possible to browse this group. The attributes (fields) of the "active record" will be read from the database and displayed in the window, after which they can be modified.

Record .. of ..      The active record of the group of points selected. Use the "Back" and "Next" buttons to move the record in the selection.

[        ]:      Input field used to modify the value of the attribute selected. Click "OK" and "Apply, continue" to finish the input, include the modification in the list of values and store it in the database. The message "Record written to database" appears in the left bottom corner (and will disappear after clicking "OK" once again).

[        ]      List of available attributes and their current value.  
 [        ]      Select an attribute to display its value in the input field above the list, after which it may be modified.

OK:      Click OK to include the value entered/modified in the list "<attribute> = waarde".

Apply, continue: The values in the list are saved in the database. Be sure to confirm the final modification with "OK", otherwise the modification will be neglected. If possible, the next record of the group of points selected will become active.

Back:      If possible, the previous record of the group of points selected will become active. The values of this record are read and displayed in the list.

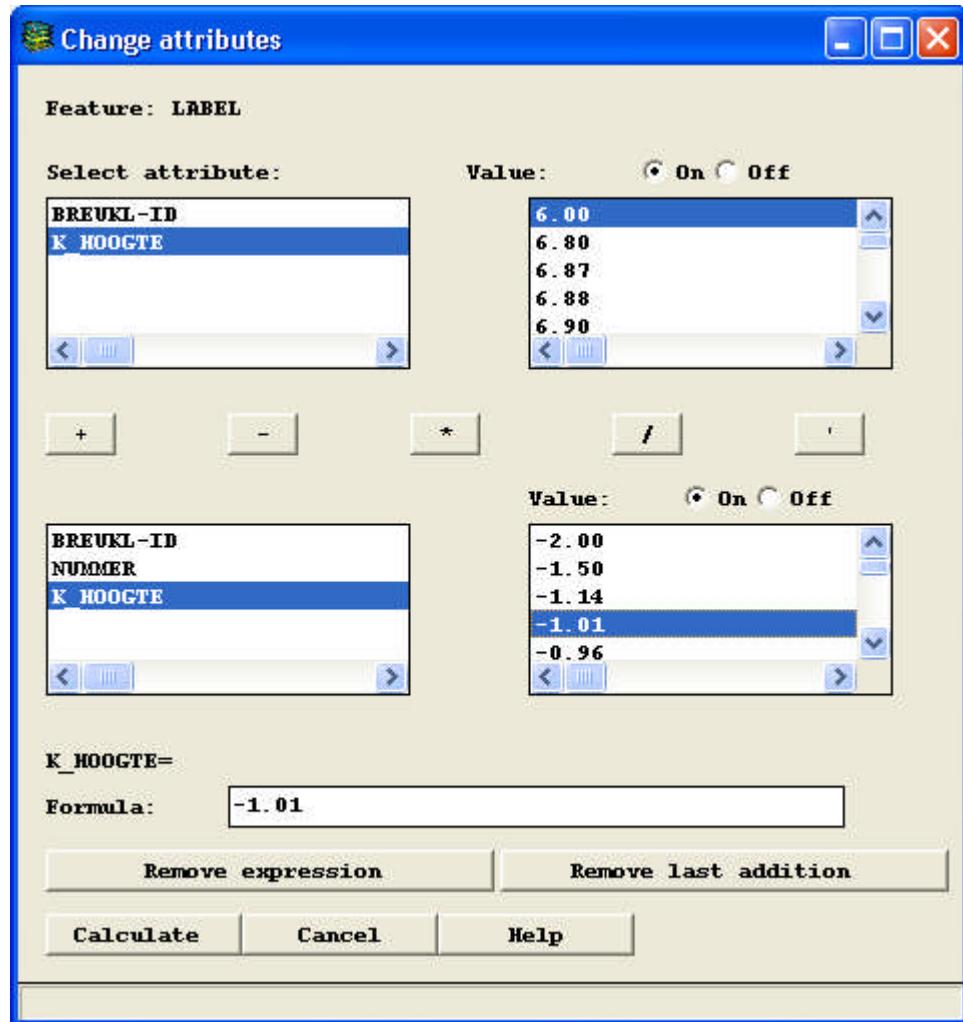
Next:	If possible, the next record of the group of points selected will become active. The values of this record are read and displayed in the list. PLEASE NOTE: the values in the list will ONLY be saved if you click "OK" and "Write, continue"!
Reset values:	Click this button to replace the values from the list by the values stored in the database. The values from the database are restored.
Stop:	Close the menu.
Help:	This screen.

Delete points: Click this button to delete points belonging to one or more lines.

Upon selection of at least one line, you will be asked to select the points to be deleted for each separate line. The line for which the points are to be selected is displayed in the top left corner of the window. The line number(s) are given on the map. Terminate the Select option by depressing <Ctrl> and the right mouse button (key 9). Any points selected but not associated with the line in question, will not be deleted.

Undo:	Undo the last edit operation.
Close:	Close the Edit window.
Help:	This screen.

## 10.3 Attributes



### Change attributes

Enter a new value or formula to modify the attribute information of selected attributes.

If lines and points have been combined into a 'geo data set' group, it is only possible to modify the attribute information of the feature selected via "Modify", "Draw". The attribute "NUMMER" cannot be changed, either.

Feature: The feature type selected.

Select attribute: Select the attribute to be modified.

Value on/off: If on is selected, all values of the selected attribute will be displayed. The values of the selected feature will be displayed only.

+: Insert the 'plus' sign into the formula.

-: Insert the 'minus' sign into the formula.

\*: Insert the 'multiplication' sign into the formula.

/: Insert the 'division' sign into the formula.

	Insert quotes into the formula for alphanumerical values (e.g. names).
Attributes:	The name of a selected attribute may be used in the formula.
Value on/off:	If on is selected, all values of the selected attribute will be displayed (i.e. only the unique values). They can be used in the formula.
Formula:	The way in which the selected attribute is to be modified. NB: The cursor must always be at the end of the line when adding elements to the formula. See the formula examples in the bottom of this Help file.
Remove expression:	Clear the entire formula.
Remove last addition:	Remove the final part of the formula.
Calculate:	The modification is made to the selected attribute of the feature in question. If successful, the following message will be displayed in the bottom left corner of the screen: "Calculation finished."
Cancel:	Do not make any further calculations and close the menu.
Help:	This screen.

First select the attribute to be modified. Next, enter a new value or a formula in the 'Formula' line. Numerical values can simply be typed. Character values (name) must be written between quotes.

#### PLEASE NOTE:

- ALWAYS put quotes before and after alphanumerical fields
- ALWAYS put a space between two formula elements:  
incorrect: HOOGTE\_96+10 correct: HOOGTE\_96 + 10

#### EXAMPLES:

Suppose the selected records for the HOOGTE field must get the value 5.1:

- Select HOOGTE in the upper list box
- Type the number 5.1 in the formula
- Click the Calculate button

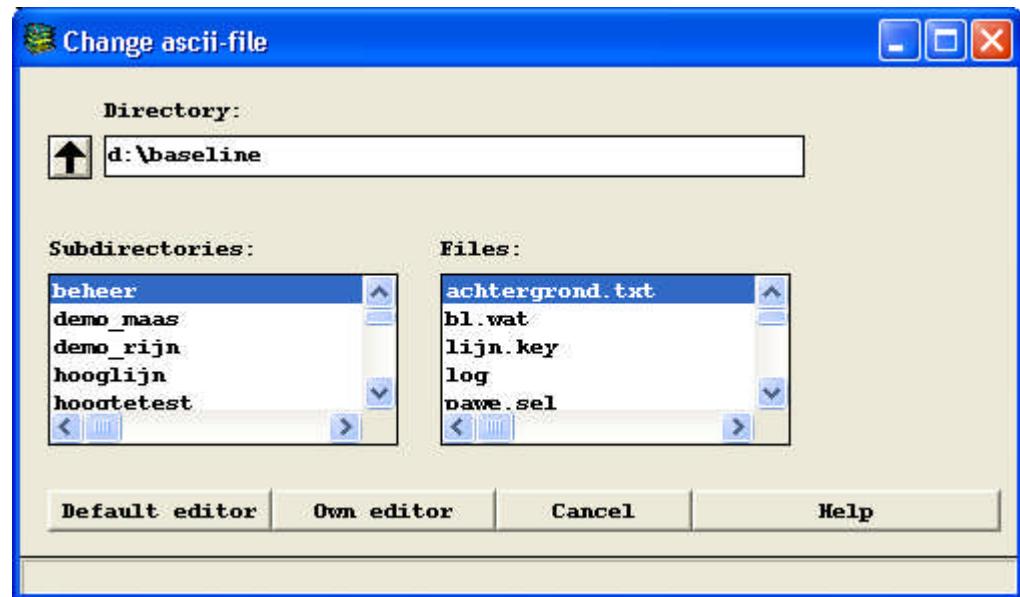
- Suppose the same records for the HOOGTE\_97 field must get the value of the HOOGTE\_96 field plus 10:

- Select HOOGTE\_97 in the upper list box
- Select HOOGTE\_96 in the lower list box
- Click the plus button
- Type 10 -----> is formula: (HOOGTE\_97 =) HOOGTE\_96 + 10
- Click the Calculate button

- Suppose the selected record for the NAAM field must get the value 'GRANT':

- Select NAAM in the upper list box
- Type 'GRANT' (including quotes)
- Click the Calculate button

## 10.4 ASCII file



### Change ascii file

---

Click "Modify", "ASCII file" to select a file in the directory. Change the file by means of the "vi" editor or any other editor set for your workstation.

'Arrow Up': Move up one directory.

Directory: This input field shows the current path.

Subdirectories: Select the directory containing the ASCII file.

Files: Select a file in the list of files in the current directory.

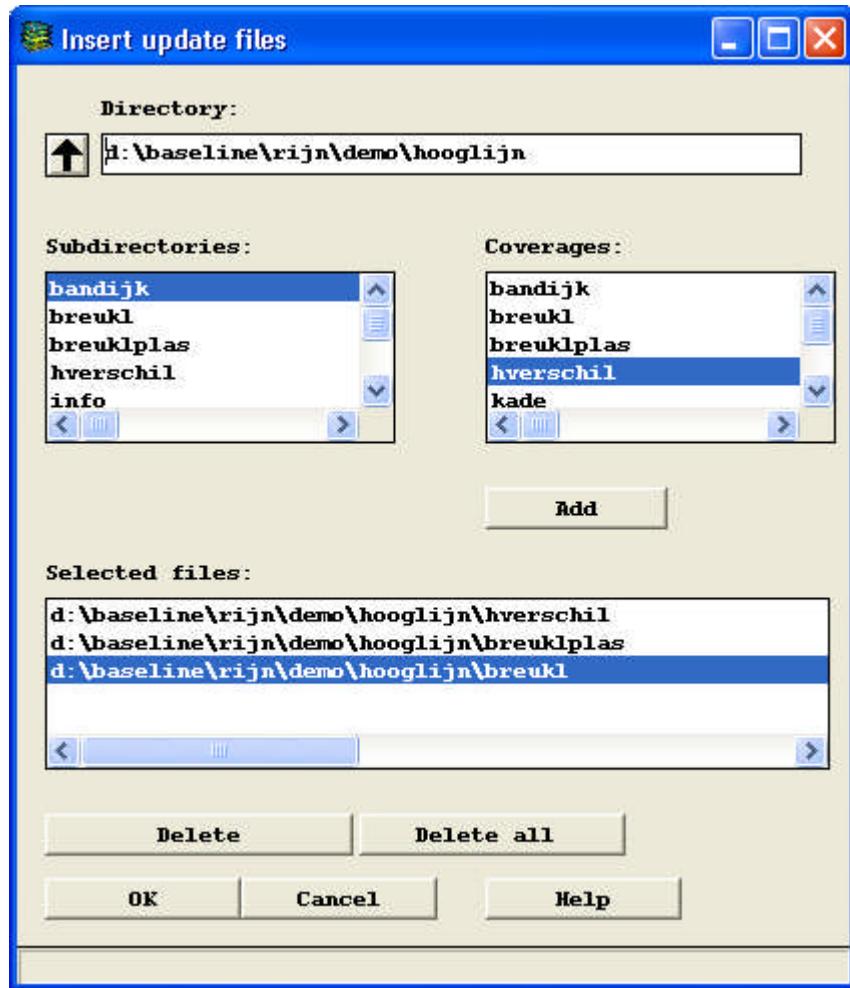
Default: Start the default editor to change the file selected.

Own editor: Start the own editor set to change the file selected.

Cancel: The menu is closed.

Help: This screen.

## 10.5 Inserting update files



### Insert update files

Use this window to make (local) modifications to the current edit coverage by means of update files.

Select the files which are to be inserted into the current edit coverage. Use single or multiple cut-and-paste operations to replace the existing contents of the edit coverage by the contents of the update file(s).

In other words: new local data overwrites existing data.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Coverages: All available coverages in the current directory.

Add: Add the selected coverage to the list of update files.  
The order in which the objects are added to the selected coverages list will affect the final result.

For example: the edit coverage contains the situation from the year 1990 and update files from 1992 and 1994 must be inserted. The correct order would be to add the file from the year 1992 prior to that of 1994.

Selected files:	List of update files.
Delete:	Delete the selected coverage from the list.
Delete all:	Delete all coverages from the list.
OK:	The update files are inserted into the edit coverage.
Cancel:	The menu is closed. The files are not inserted in the edit coverage.
Help:	This screen.

Update files can only be added to the edit coverage if the attribute structure of both files is identical (similar attributes with equal specifications).

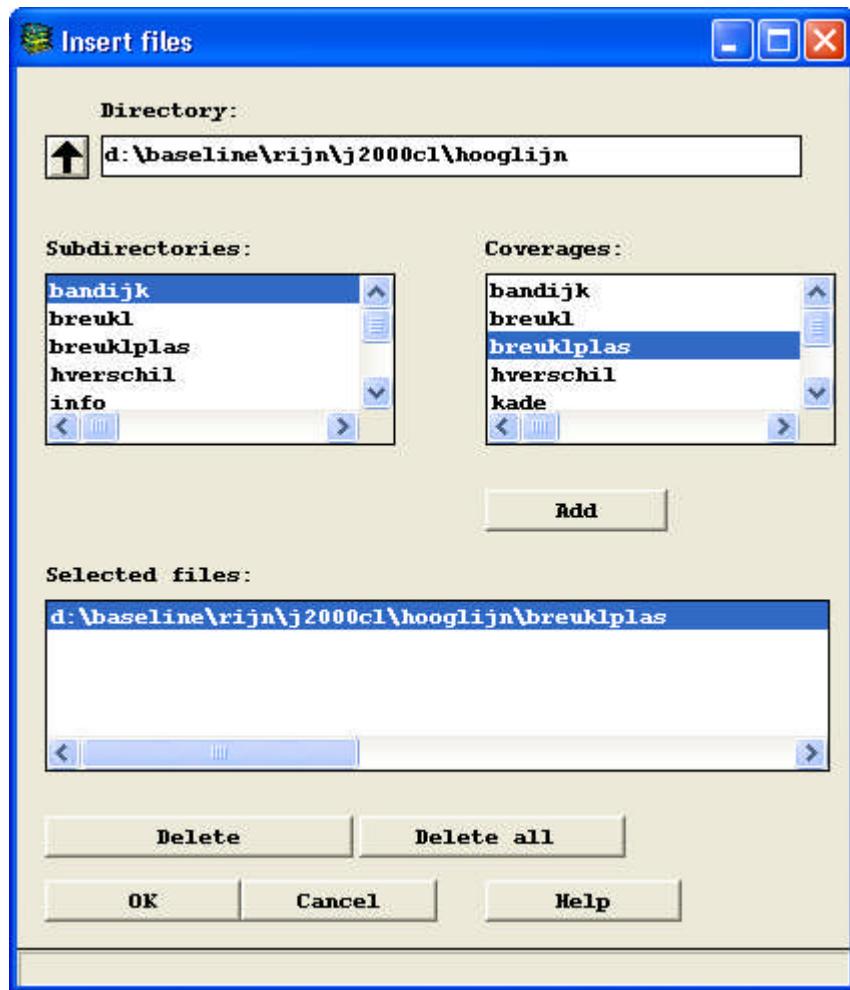
In case of point objects, the application will delete any points from the edit coverage located within a predetermined distance from points in the update file.

In case of line objects, the application will delete any lines from the edit coverage which are either located within a predetermined distance from lines in the update file or intersecting.

PLEASE NOTE: all intersecting line elements will be removed !!!

In case of polygon objects, the application will delete any polygons from the edit coverage located in an area where new or modified polygons from the update file will be located.

## 10.6 Inserting files



### Insert files

Use this window to insert new (local) data files into the current edit coverage.

The user may select one or more files to be inserted into the current edit coverage.  
In other words: new local data is added to existing data.

'Arrow Up': Move up one directory.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Coverages: All available coverages in the current directory.

Add: Add the selected coverage to the list of coverages.  
In case of polygon objects, the order in which the objects are added to the selected coverages list will affect the final result.

For example: the edit coverage contains the situation from the year 1990 and update files from 1992 and 1994 must be inserted. The correct order would be to add the file from the year 1992 prior to that of 1994.

Selected files:	List of files to be inserted.
Delete:	Delete the selected coverage from the list.
Delete all:	Delete all coverages from the list.
OK:	The files are added to the edit coverage.
Cancel:	The menu is closed. The files are not inserted in the edit coverage.
Help:	This screen.

Files can only be added to the edit coverage if the attribute structure of both files is identical (similar attributes with equal specifications).

In case of polygon objects, the application will delete any polygons from the edit coverage located in an area where new or modified polygons from the update file will be located.

## 10.7 Saving

The edit coverage modifications can be saved. After finishing the session, the changed files topology will be automatically built.

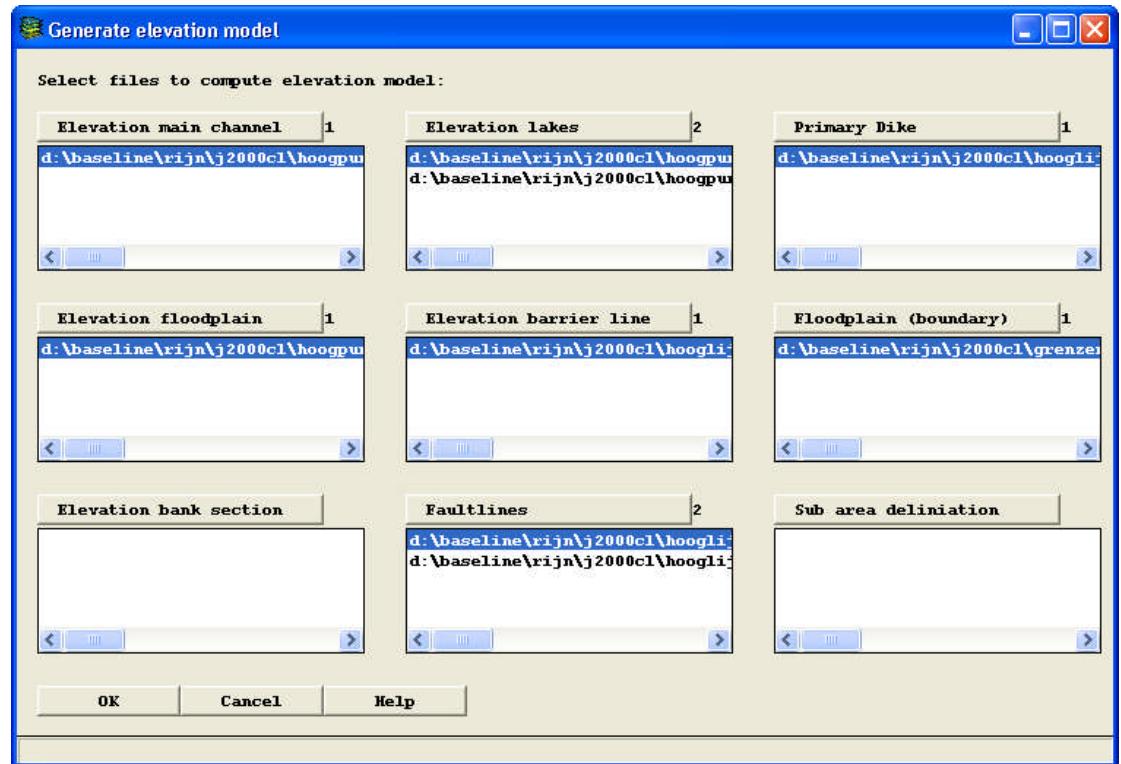
After modification of the coverages which form the basis for the derived weir and section coverages the user will be requested to create new coverages:

- Modification of summer dike, groyne and elevation boundary line coverages will require the creation of a new weir coverage.
- Modification of bank line, normal line and floodplain coverages will require the creation of a new section coverage.

## 11 Tools

### 11.1 Generating elevation model

After clicking the option "Generate elevation model", the user can select "Generate elevation model v3.3" or "Generate elevation model v3.0". The Baseline version 3.3 has an improved function for TIN creation. Line and point coverages (fault lines, primary dikes and elevation boundary lines) are converted to 3D ungenerate files and are offered to the CREATETIN routine, instead of being offered separately as line and point coverage. After the user has made a selection, the following window will be displayed:



#### Generate elevation model

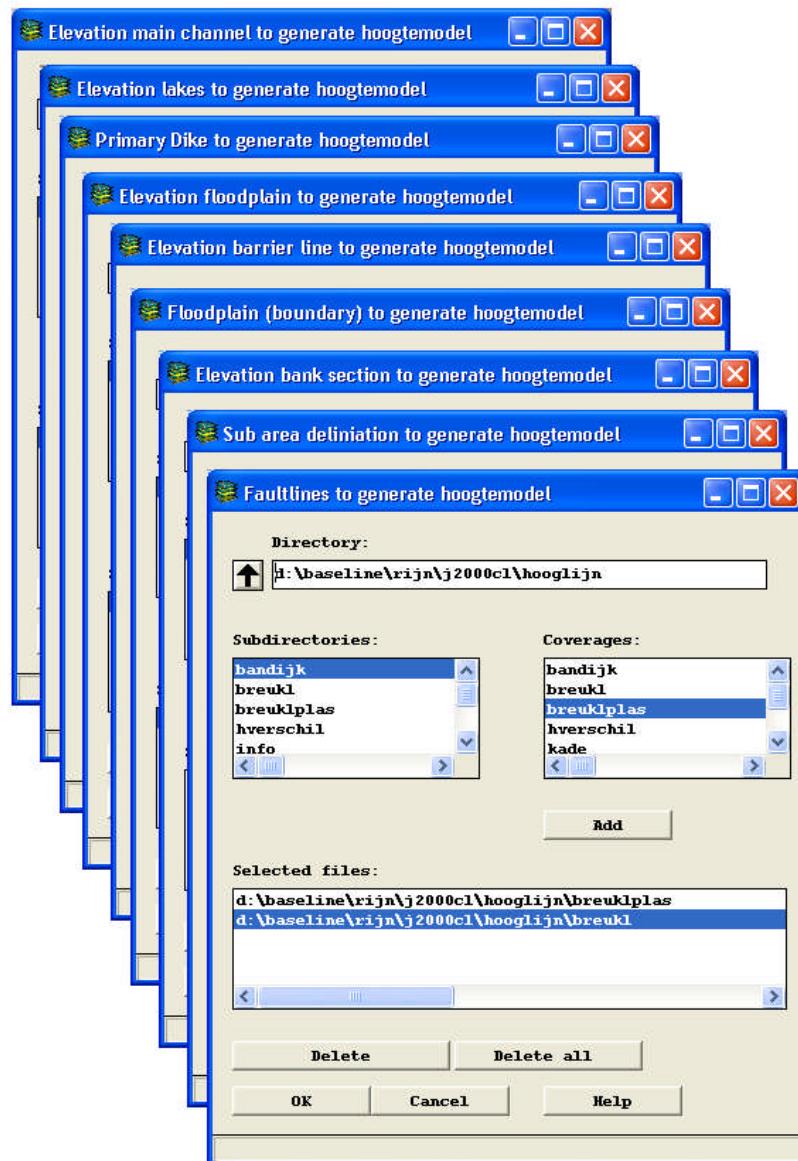
Use this function to create an elevation model (TIN) from a number of (bed) level line and point files by means of interpolation. The creation of the elevation model and the choice of the files to be used has been geared to the specific requirements set by the WAQUA and SOBEK flow models. Seven categories of files can be specified (of which only 1 is compulsory): main channel, floodplain, bank and lake elevation data, elevation boundary lines, fault lines and primary dike. In each category several files can be selected. Furthermore, either a floodplain delineation and/or sub-area delineation file must be selected (one of either is compulsory). The elevation model is only created for the delineated areas. All elevation data is included in the creation of the elevation model. In case of the elevation boundary lines, fault lines and primary dike, the lines are taken to be soft lines of fracture. In case of primary dikes, the user must choose between the use of either toe elevation (ALWAYS for WAQUA, USUALLY for SOBEK) or crown elevation (SOMETIMES for SOBEK).

Select coverages:

Click one of the buttons to open a window in which files of the corresponding type can be selected. The application will verify immediately whether the selected file is indeed a file of the type in question. The list below each button gives an overview of the files selected so far.

To create the elevation model, at least 1 elevation data coverage has to be selected. It is also necessary to delineate an area by means of 'Floodplain' and/or 'Sub-area delineation'.

Elevation main channel:	A coverage containing main channel elevation measurements (points).
Elevation floodplain:	A coverage containing floodplain elevation measurements (points).
Elevation banks:	A coverage containing bank elevation measurements (points).
Elevation lakes:	A coverage containing lake elevation measurements (points).
Elevation boundary lines:	A coverage containing elevation boundary lines and any elevation points on these lines.
Fault lines:	A coverage containing fault lines according to the digital river map. The elevation of the points on these lines is known.
Primary dike:	A coverage containing lines indicating the location of the primary dike crown. It also contains points indicating crown and toe elevation. The user must choose either crown or toe elevation (see above).
Floodplain (delineation):	A polygon coverage containing floodplain outlines. If no 'Sub-area delineation' has been specified, this coverage defines the scope of the elevation model.
Sub-area delineation:	A coverage defining a floodplain sub-area. This may be an existing polygon coverage or a so-called box. The elevation model is clipped according to this area and the lines are defined as hard lines of fracture.
OK:	The elevation model is created from the selected coverages. This opens a dialog box in which the location and name of the elevation model can be entered. After filling this field, the elevation model is generated. The time required for the creation of the elevation model depends on the number of files and the size of the delineation coverage(s).
Cancel:	Do not make the elevation model and close the menu.
Help:	This screen.



### Coverages to generate elevation model

Use this window to select input coverages for the creation of an elevation model.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

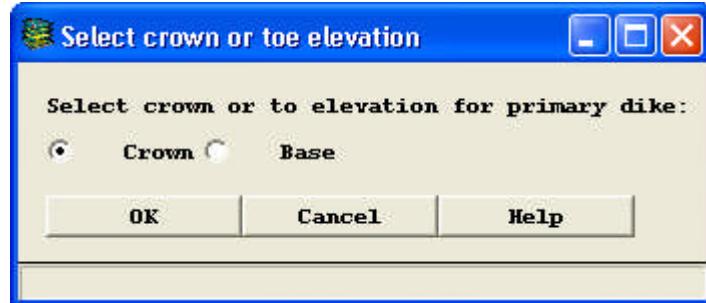
'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Coverages: Available coverages in the current directory.

Add: Add the selected coverage to the list.

If the coverage does not contain the correct features and/or items, you will be notified and the coverage will not be added to the list. If a coverage of the primary dike type is to be added, you will be requested to select either crown or toe elevation.



### Select crown or toe elevation

---

Select primary dike crown or toe elevation.

Click one of the buttons to select the crown or toe elevation. This value will be included in the calculation of the elevation model. The selection applies to all selected coverages of the primary dike type.

OK: Accept the selection.

Cancel: Close the menu. The crown elevation will be used in the creation of the elevation model.

Help: This screen.

Selected files: Gives an overview of all coverages selected so far.

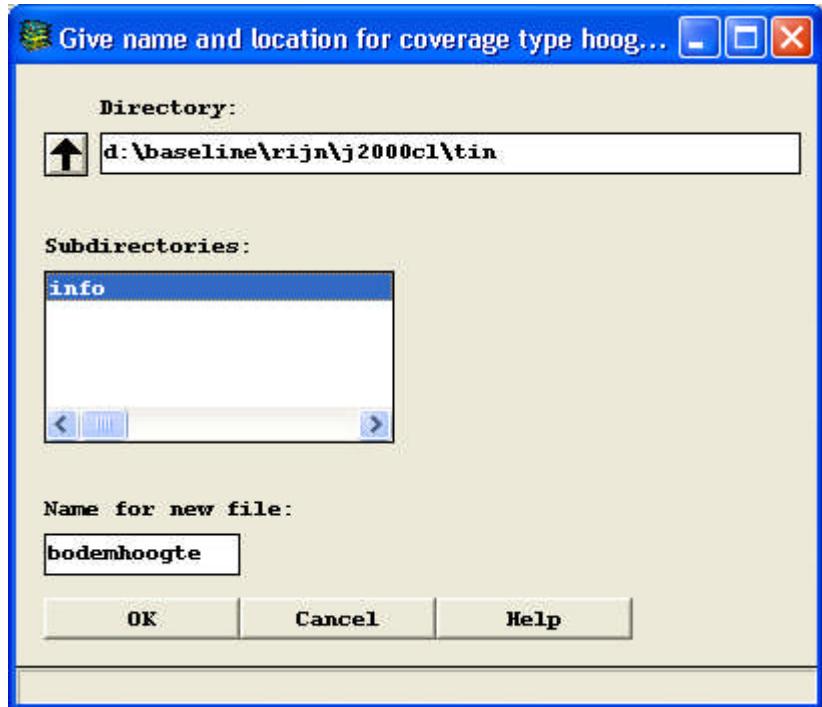
Delete: Highlight a coverage in the list and next click this button to delete it.

Delete all: The selected coverages list will be emptied. No coverages are selected anymore.

OK: Accept the coverage(s) selected and return to the previous window.

Cancel: Do not make any changes and close the menu.

Help: This screen.



#### Give name and location for coverage type hoog...

Use this window to enter the output directory and name for the elevation model.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

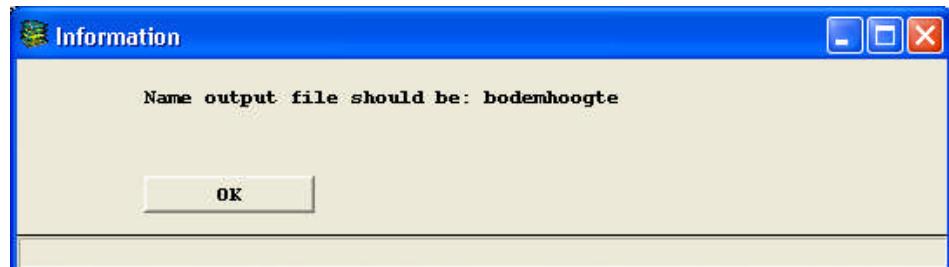
Name for new file: Enter a new name for the elevation model to be created.

OK: The elevation model name is saved and you are returned to the previous window, after which the elevation model is created.

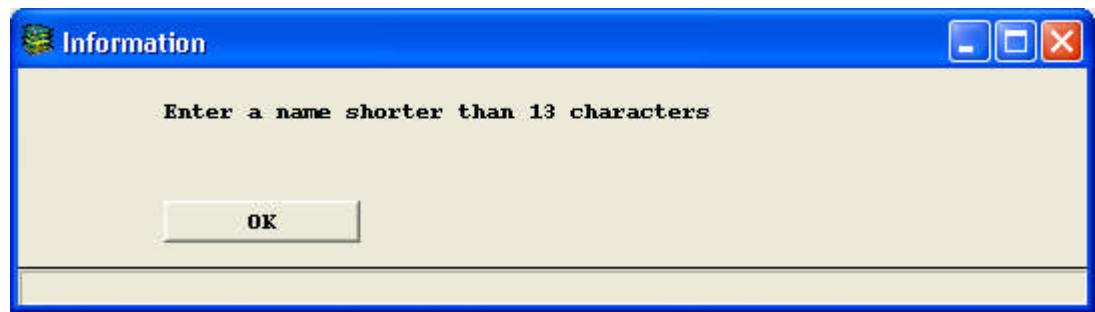
Cancel: The menu is closed. The name is not saved.

Help: This screen.

The default name for the elevation model is "bodemhoogte". This name is compulsory. If a different name is entered, the following message will be displayed:



If a name contains more than 13 characters, the following message is displayed.



Furthermore, the user must, analogous to the protocol, save the elevation model in a workspace named "tin". The user can choose a different variant than the one worked in.

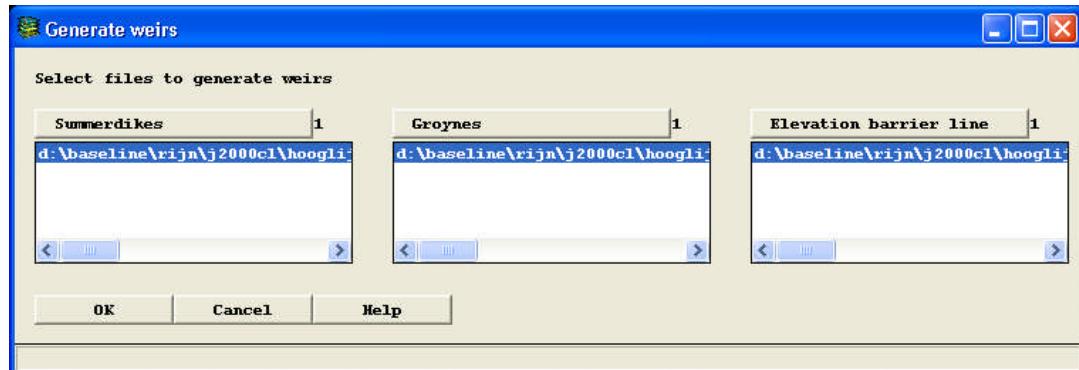


When the elevation model is created, a log file will be kept with the following features:

Name: BODEMTIN.LOG

1. Top line with date and time
2. Subsequently, type and name of the input file (including path name).
3. Output file (including path name)
4. Final line with date and time

## 11.2 Generating weirs



### Generate weirs

Use this function to create a weir coverage with elements affecting the flow rate. The term "weir" is a collective noun for summer dikes, groynes and elevation boundary lines. Only elevation boundary lines qualified as weirs are included in the creation of the weir coverage. The user may enter one or more coverages per type of weir (summer dike, groyne or elevation boundary line). For the creation of a weir coverage at least one file must be selected.

Select coverages:

Click one of the buttons to open a window in which coverages of the corresponding type can be selected. The application will verify whether the selected coverage is indeed a file of the type in question. The list below the button gives an overview of the coverages selected so far.

Summer dikes:

A coverage containing summer dikes, cuttings and/or quays (lines) and any elevation points on these lines.

Groynes:

A coverage containing groynes (lines) and any elevation points on these lines.

Elevation boundary lines: A coverage containing elevation boundary lines and any elevation points on these lines. Only points and lines which have been qualified as weirs are included in the creation of the weir file.

OK:

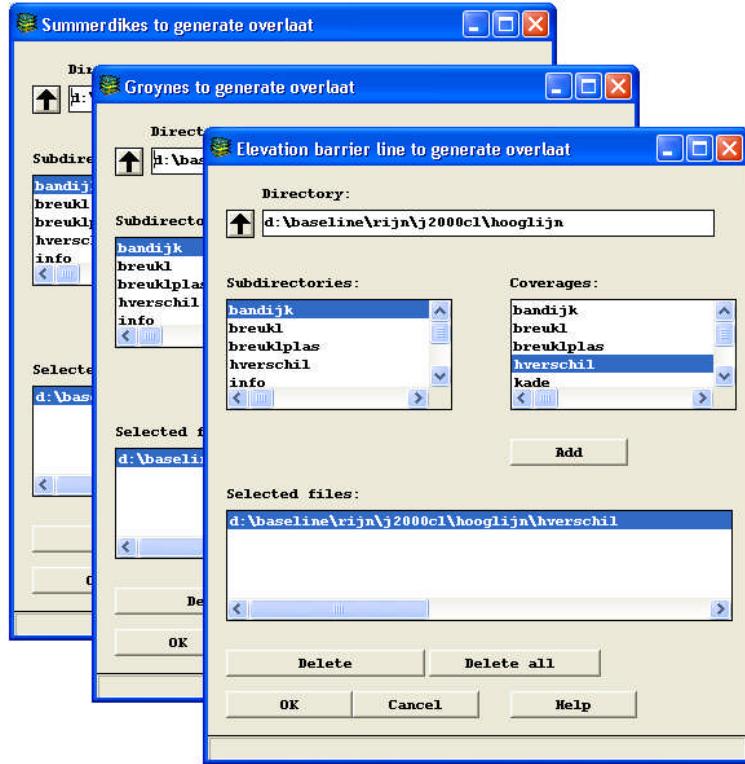
Accept the selected coverages. This opens a dialog box in which the location and name of the weir coverage can be entered. After having entered the name, the weir coverage will be created.

Cancel:

Do not make any changes and close the menu.

Help:

This screen.



### Covernages to generate weirs

---

Use this window to select input coverages for the creation of an elevation model.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Covernages: Available coverages in the current directory.

Add: Add the selected coverage to the list. If the coverage does not contain the correct features and/or items, you will be notified and the coverage will not be added to the list.

Selected files: Gives an overview of all coverages selected so far.

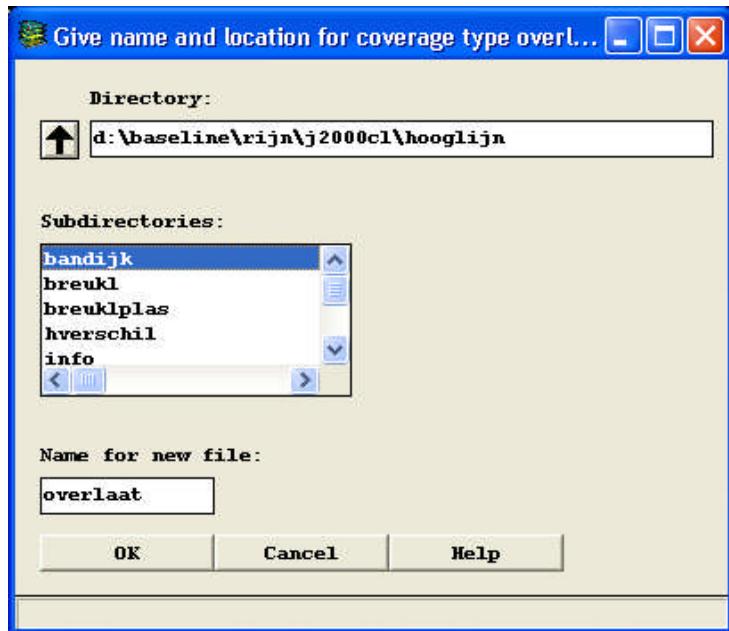
Delete: Highlight a coverage in the list and next click this button to delete it.

Delete all: The selected coverages list will be emptied. No coverages are selected anymore.

OK: Accept the coverage(s) selected and return to the previous window.

Cancel: Do not make any changes and close the menu.

Help: This screen.



#### Give name and location for coverage type overl...

Use this window to enter the output directory and name for the weir coverage.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

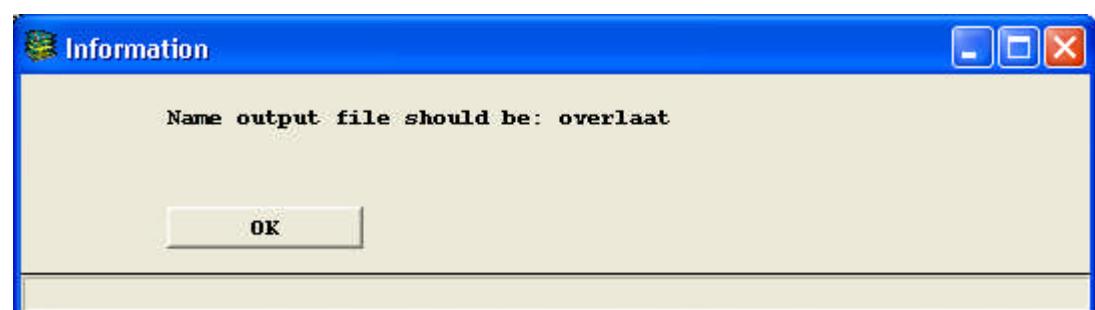
Name for new file: Enter a new name for the weir coverage to be created.

OK: The weir coverage name is saved and you are returned to the previous window, after which the weir coverage is created.

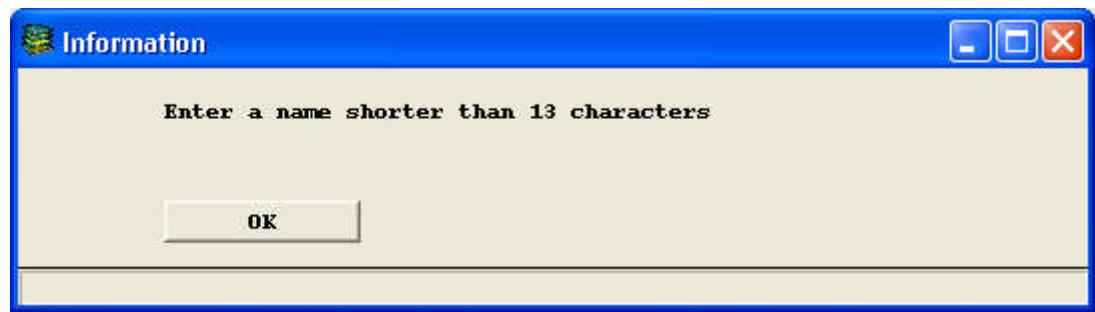
Cancel: The menu is closed. The name is not saved.

Help: This screen.

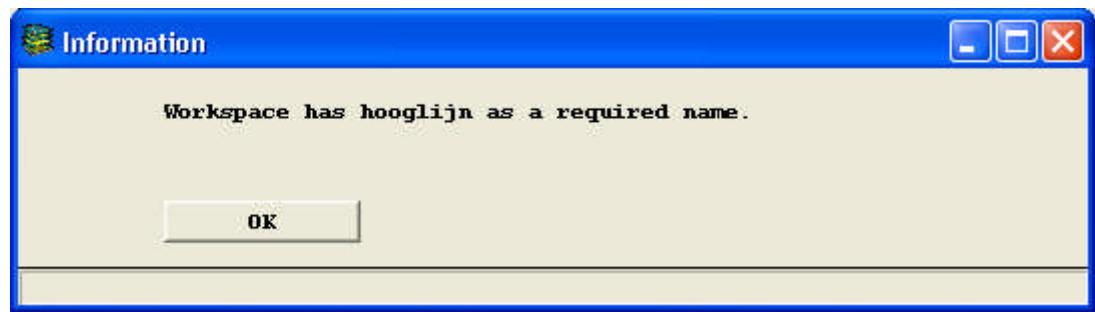
The default name of the weir coverage to be generated is "overlaat". This name is compulsory. If a different name is entered, the following message will be displayed:



If a name contains more than 13 characters, the following message is displayed.



Furthermore, the user must, analogous to the protocol, save the weir coverage in a workspace named "hooglijn". The user can choose a different variant than the one worked in.

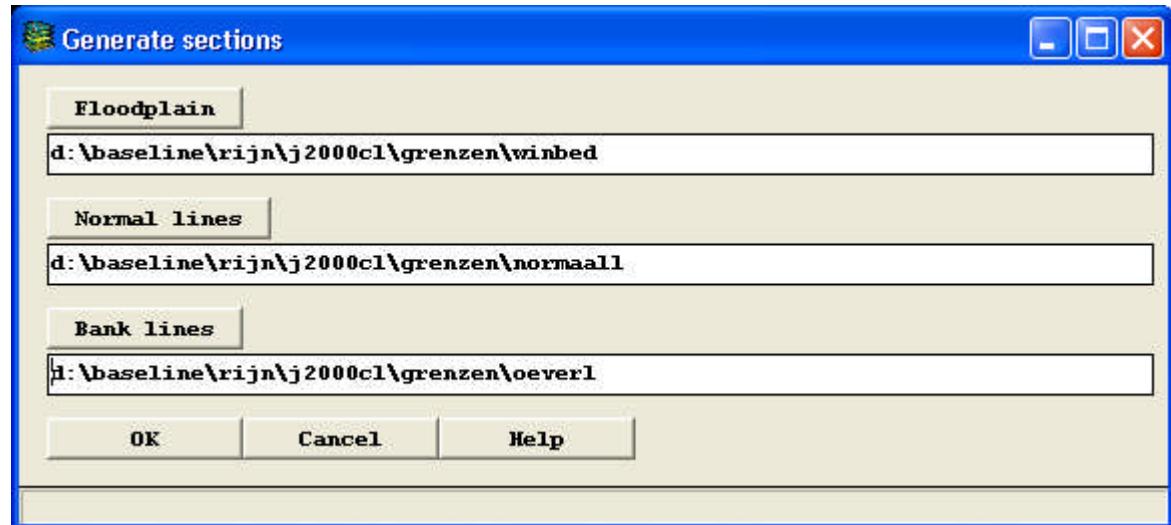


When the weirs are created, a log file will be kept with the following features:

Name: OVERLAAT.LOG

1. Top line with date and time
2. Subsequently, type and name of the input file (including path name).
3. Output file (including path name)
4. Final line with date and time

### 11.3 Generating sections



#### Generate sections

Use the "Generate sections" window to create a section coverages from coverages with floodplains, normal lines and bank lines. All three coverages are **COMPULSORY!**

The sections are assigned the following types:

1 = main channel or main section
2 = groyne or bank section
3 = floodplain section

Floodplain: Click this button to select the floodplain file in the next window.

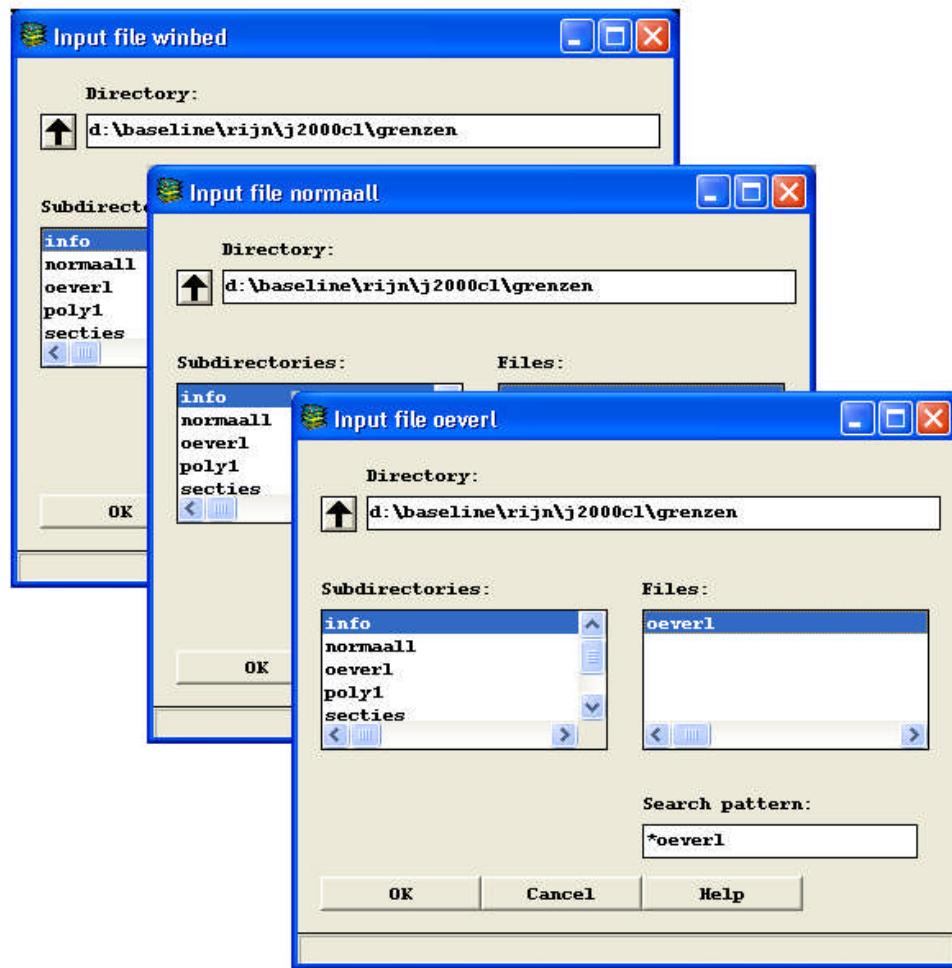
Normal lines: Click this button to select the normal line file in the next window.

Bank lines: Click this button to select the bank line file in the next window.

OK: Enter the output directory in the next window. The section coverage will now be created.

Cancel: The menu is closed.

Help: This screen.



#### "Generate sections" input file

Use this window to select the input for "Generate sections". The input includes floodplains, normal lines and bank lines. All three coverages are **COMPULSORY!**

Directory: This input field shows the current path.

'Arrow Up': Move up one directory.

Subdirectories: Select the directory containing the input coverage.

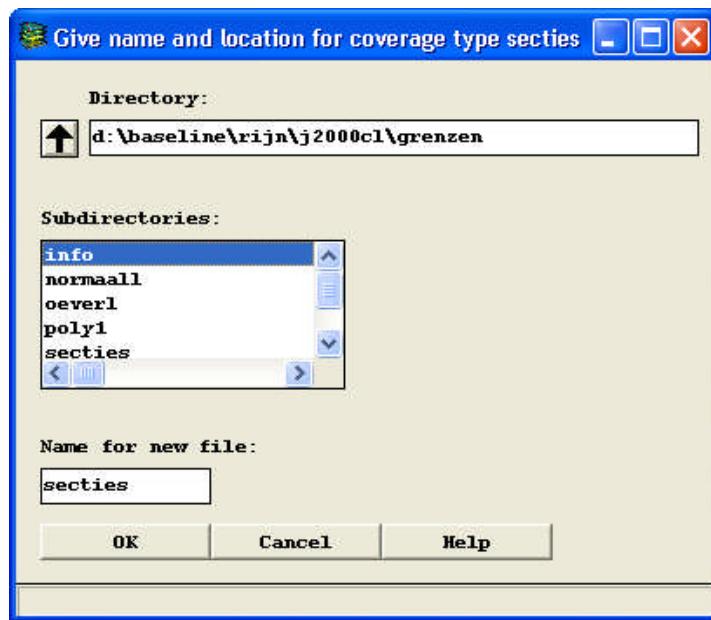
Files: Summary of files in the current directory.

Search pattern: Enter one or more letters to make a selection from the coverages shown. Use the wildcard \* to replace a number of unknown letters and ? to replace a single unknown letter. By default, the system will look for the (original) name of the coverage in question.

OK: The coverage is selected as input coverage.

Cancel: The menu is closed.

Help: This screen.



#### Give name and location for coverage type secties

Use this window to select the output directory for the sections coverage. The section coverage gets the name "secties".

Directory: This input field shows the current path.

'Arrow Up': Move up one directory.

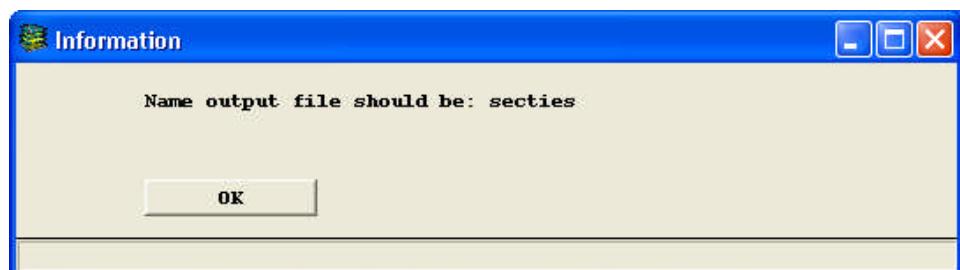
Subdirectories: Select the directory in which the output coverage is to be created.

OK: The directory is selected as output directory and the section coverage is created immediately. If the section coverage already exists in the output directory indicated, a warning is given and you will be asked whether the coverage has to be overwritten.

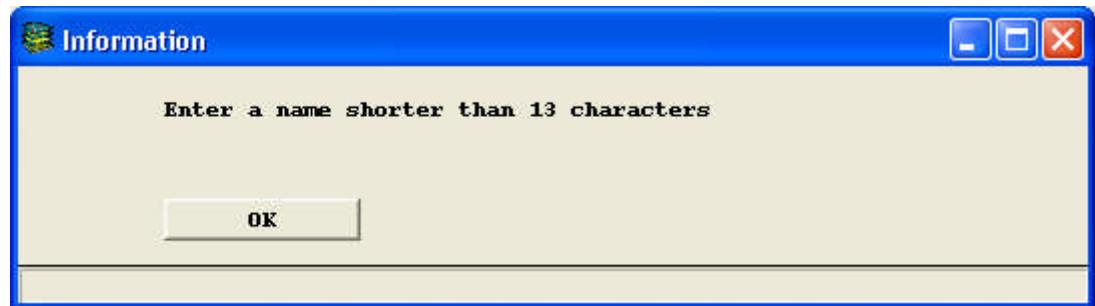
Cancel: The menu is closed.

Help: This screen.

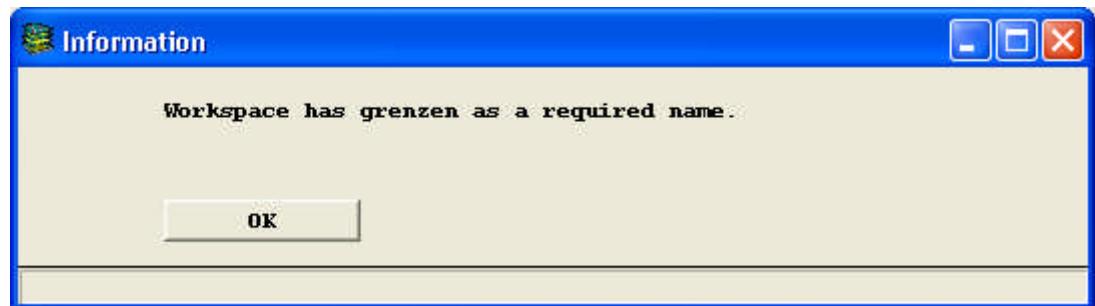
The default name for the sections to be created is "secties". This name is compulsory. If a different name is entered, the following message will be displayed:



If a name contains more than 13 characters, the following message is displayed.



Furthermore, the user must, analogous to the protocol, save the sections in a workspace named "grenzen". The user can choose a different variant than the one worked in.



When the sections are created, a log file will be kept with the following features:

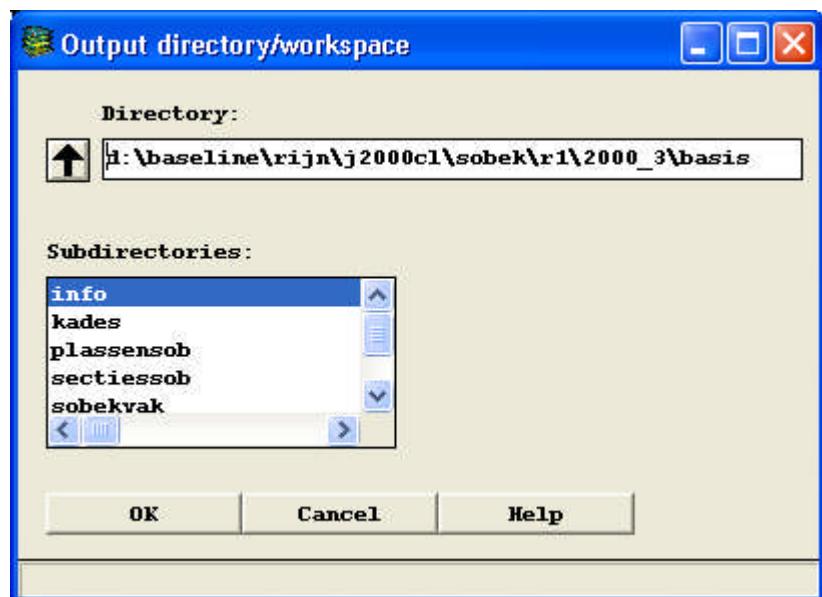
Name: SECTIES.LOG

1. Top line with date and time
2. Subsequently, type and name of the input file (including path name).
3. Output file (including path name)
4. Final line with date and time

## 11.4 SOBEK files

### 11.4.1 Create compartments

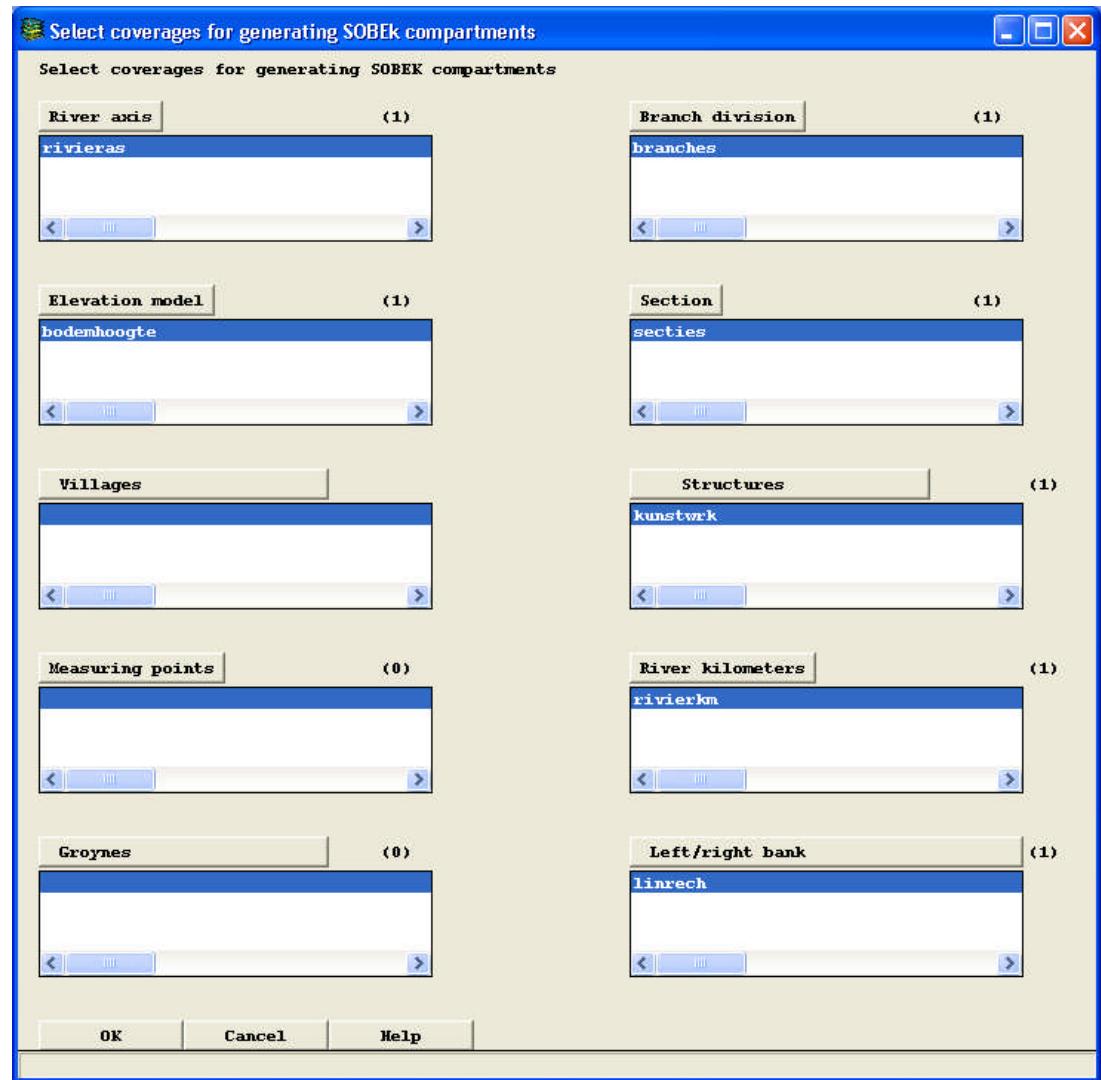
#### 11.4.1.1 Main channel compartments



#### Output directory/workspace

Use this window to select the SOBEK compartment file directory. After clicking the OK button to confirm the selection, a window will be opened in which all compulsory (and optional) data can be entered.

Directory:	This input field shows the current path.
'Arrow Up':	Move up one directory.
Subdirectories:	Select the 'basis' directory in which the SOBEK compartment file is to be created.
OK:	The selected directory is confirmed and an input file entry window is opened.
Cancel:	The menu is closed.
Help:	This screen.



### Select coverages for generating SOBEK compartments

Use this window to enter data for the creation of SOBEK compartments. If the "old data" question in the previous window has been answered with yes, the lists are already filled. The user can change this data if necessary.

Please note: only one item can be entered at a time. Click the buttons to start the search procedure and to refer to the help offered there.

The buttons below all follow the same procedure. Click one of the buttons to open a field in which the item mentioned on the button can be entered for a directory search procedure. A number of items is compulsory, others are optional. Click OK in the search window if the data has been found. The data selection appears in the field below the button.

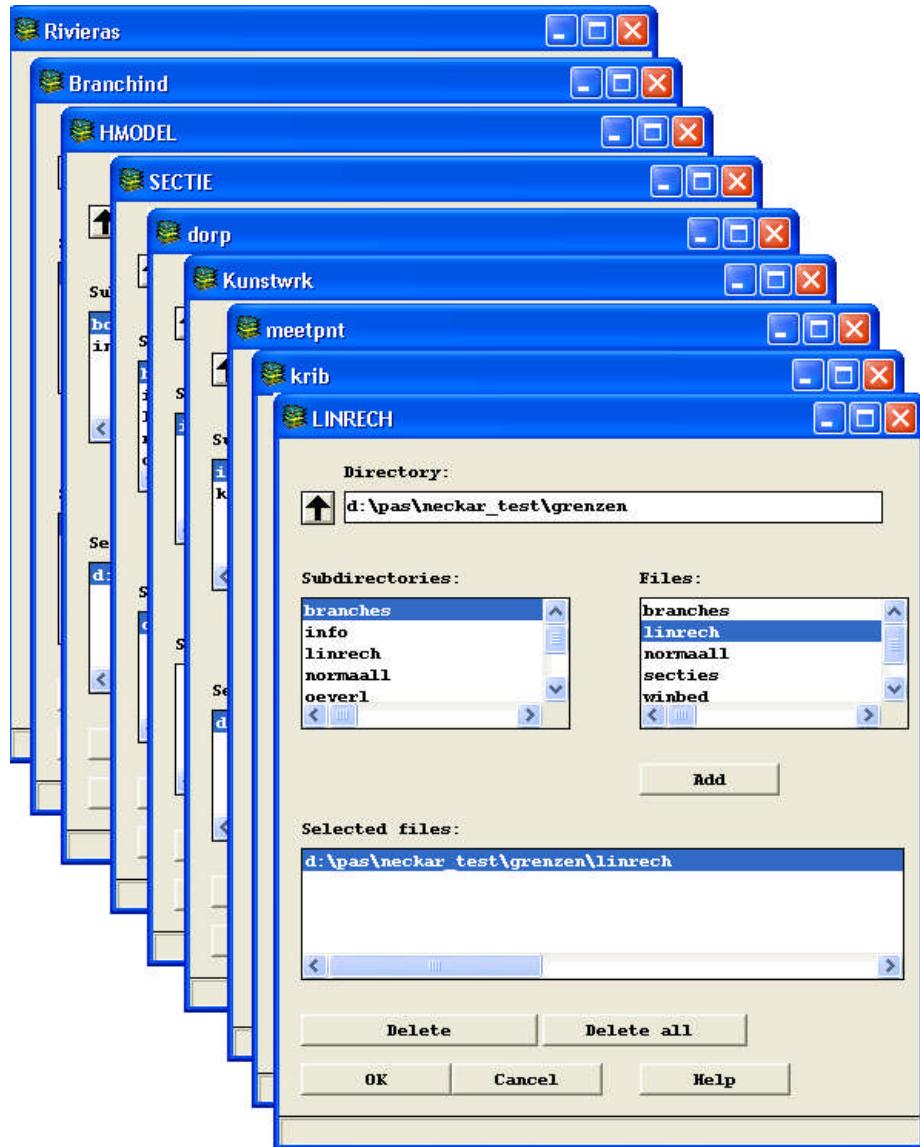
Buttons for the entry of compulsory data

- River axis
- Elevation model
- Measuring points
- Branch division
- Section
- Structures
- River kilometres
- Left/right bank

Buttons for the entry of optional data

- Villages
- Groynes

Click OK to open the SOBEK compartment main window once all compulsory data has been entered.



#### Select files

Use these windows to find and select one or more input files.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Files: Files in the current directory. Click one of the files to select it.

Add: Click on this button to add the selected file to the list. If the file cannot be added to the list, this will be reported at the bottom of the menu. Possible reasons may be: only one file to be selected; a missing field in the file.

Selected files: Gives an overview of all files selected so far.

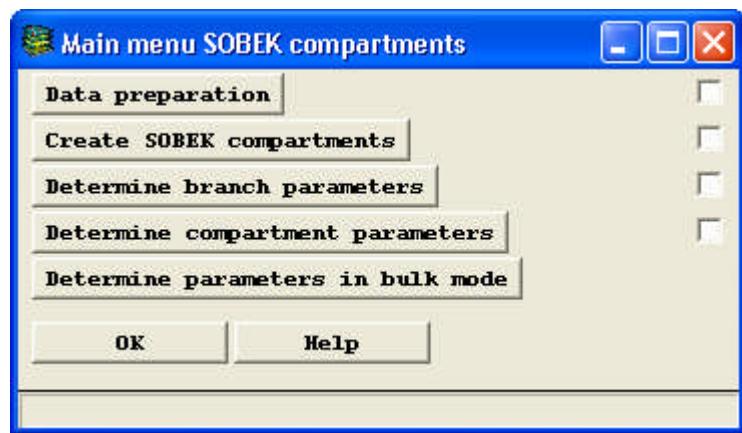
Delete: Use this option to cancel a selection. The file highlighted in the "selected files" overview will be removed from the list.

Delete all: The entire "Selected files" list will be emptied.

OK: The file selection is passed on. You are returned to the previous window.

Cancel: This menu is closed. The original selection is not changed.

Help: This screen.



#### Main menu SOBEK compartments

Use this window to perform several tasks in order to create SOBEK compartments and their corresponding parameters.

**PERFORM ALL TASKS CONSECUTIVELY (TOP BUTTON FIRST).**

If the check box is checked, the process is completed.

Activate the button to have the system verify whether the process is completed. The check box will be checked if this is the case. If this is not the case, the process will be carried out after which the check box will be checked. The user can also manually check the check box, in which case the process will not be carried out. If the user incorrectly checks the checkbox, an error might occur during the subsequent process. Manually checking the check box is therefore inadvisable.

**Data preparation:** Click this button to open the next window and carry out the process.

**Create SOBEK compartments:** Click this button to start the creation of SOBEK compartments.

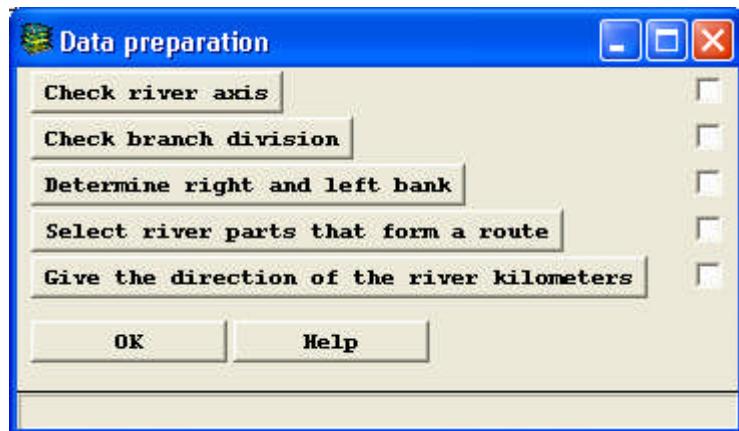
**Determine branch parameters:** Click this button to determine the branch parameters.

**Determine compartment parameters:** Click this button to determine the compartment parameters.

Determine parameters in bulk mode: Click this button to determine the compartment and branch parameters for a series of branches.

OK: Click OK to close the main window.

Help: This screen.



### Data preparation

Use this window to perform several tasks in order to prepare the creation of SOBEK compartments.  
**PERFORM ALL TASKS CONSECUTIVELY (TOP BUTTON FIRST).**

If the check box is checked, the process is completed.

Activate the button to have the system verify whether the process is completed. The check box will be checked if this is the case. If this is not the case, the process will be carried out after which the check box will be checked. The user can also manually check the check box, in which case the process will not be carried out. If the user incorrectly checks the checkbox, an error might occur during the subsequent process. Manually checking the check box is therefore inadvisable.

Check river axis: Click this button to put the river axis line elements in the correct direction (downstream).

Check branch division: Click this button to check the branch division and to indicate which line element(s) must be taken into account when calculating the distances.

Determine right and left bank: Click this button to determine the left and right banks for a section, based on the direction of the river axis entered.

Select river parts that form a route: Use this button to indicate the model's route by selecting specific route sections.

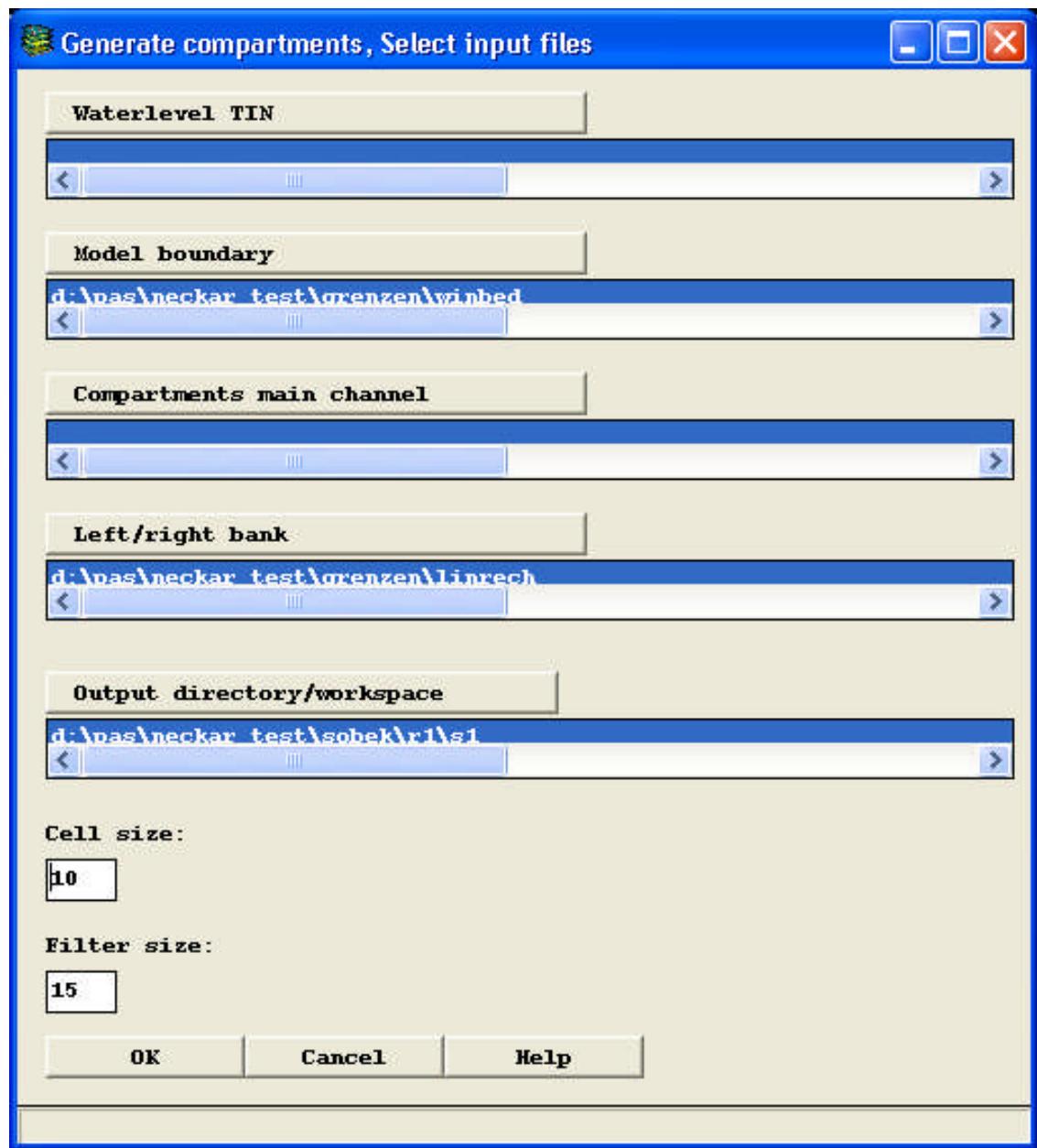
Give the direction of the river kilometres: Click this button to indicate/change the river kilometre direction for each separate river axis line element.

OK: Click OK to close the data preparation window.

Help:

This screen.

#### 11.4.1.2 Floodplain compartments



#### Generate compartments, Select input files

This function is used for the creation of a SOBEK compartment file on the basis of a WAQUA water level field. Use this window to select the input files and the schematization directory.

Water level TIN: Select a TIN which is created on the basis of a WAQUA result (points).

Model boundary: Select a polygon file which reflects the model boundary (e.g. winbed)

Compartments main channel: Select a polygon file with main channel compartments.

Left/right bank: Select a polygon file which divides the model into a left bank and a right bank (linrechts, for example)

Output directory/workspace: Select the schematization directory containing the "basis" subdirectory where the output files are created.

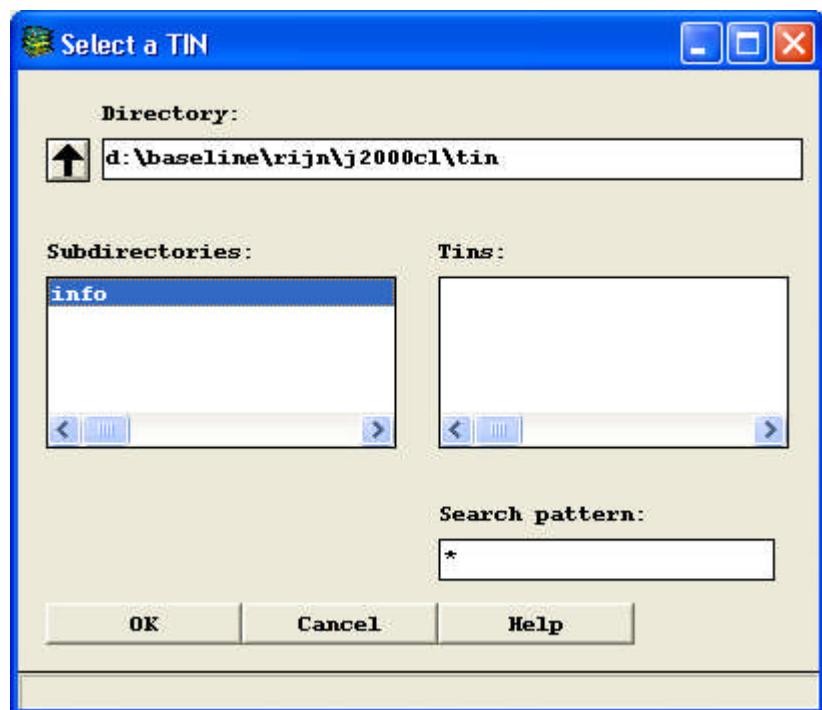
Cell size:

Filter size:

OK: Starts the creation of the compartments.

Cancel: The menu is closed.

Help: This screen.



#### Select a TIN

Use this window to select a water level TIN for the creation of SOBEK compartments in the floodplain.

Current directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

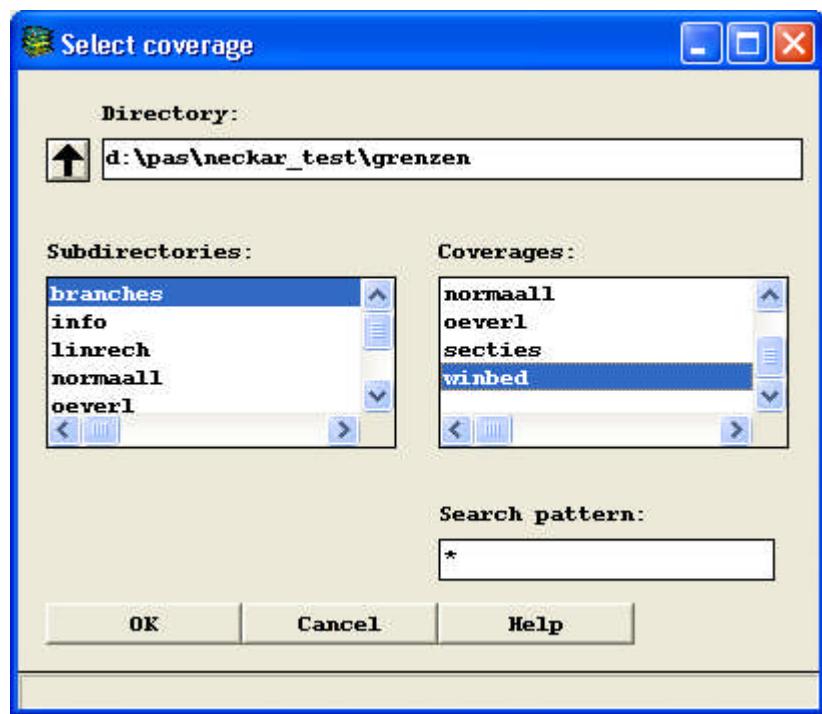
Tins: Available TINs in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



### Select coverage

---

Use this window to select a coverage for the previous page.

Current directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

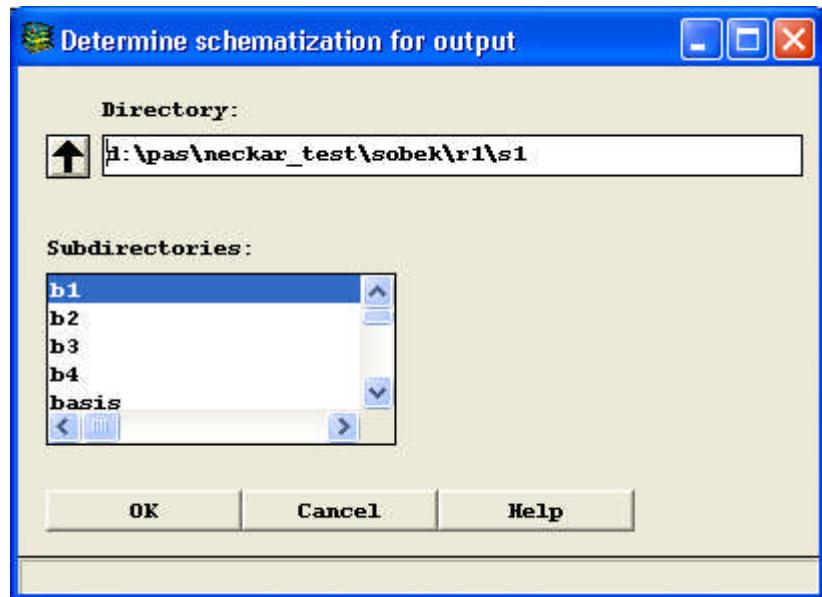
Coverages: Available coverages in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



#### Determine schematization for output

---

Use this function to select a SOBEK schematization. The results are located in this schematization.

Directory: This input field shows the current path.

'Arrow Up': Move up one directory.

Subdirectories: Select a directory with a schematization.

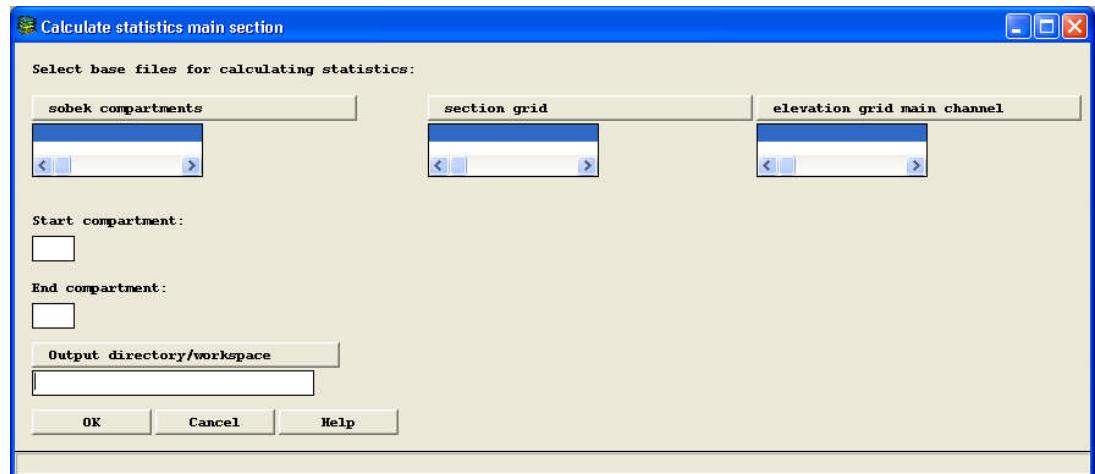
OK: The schematization directory is selected.

Cancel: The menu is closed.

Help: This screen.

### 11.4.1.3. Elevation statistics

#### 11.4.1.3.1. Main section



##### Calculate statistics main section

Use this function to calculate elevation statistics for the main channel section. The created ASCII file gives five elevation percentages for each compartment (100 - 99 - 5 - 1 - 0).

SOBEK compartments: Select the polygon file with SOBEK compartments (e.g. sobekvak).

Section grid: Select the section grid (e.g. secties).

Elevation grid main channel: Select the grid with floodplain elevation data (e.g. hoogzom).

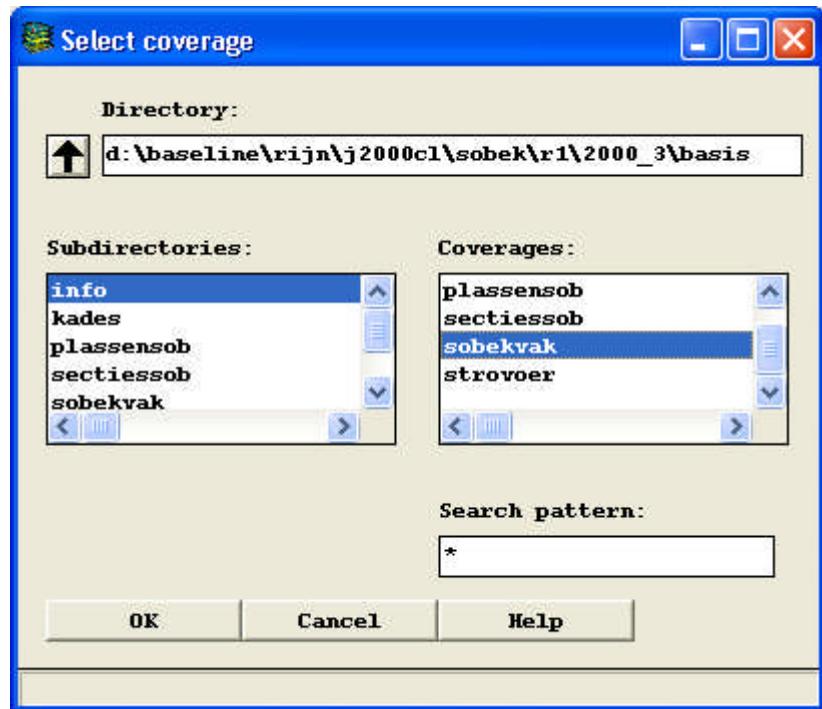
Start/end compartment: Enter the start and end compartment numbers between which calculations are to be performed.

Output directory/workspace: Select the schematization directory containing the "basis" subdirectory where the output files are created.

OK: Starts the elevation statistics calculation.

Cancel: The menu is closed.

Help: This screen.



### Select coverage

---

Use this window to select a coverage for the previous page.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

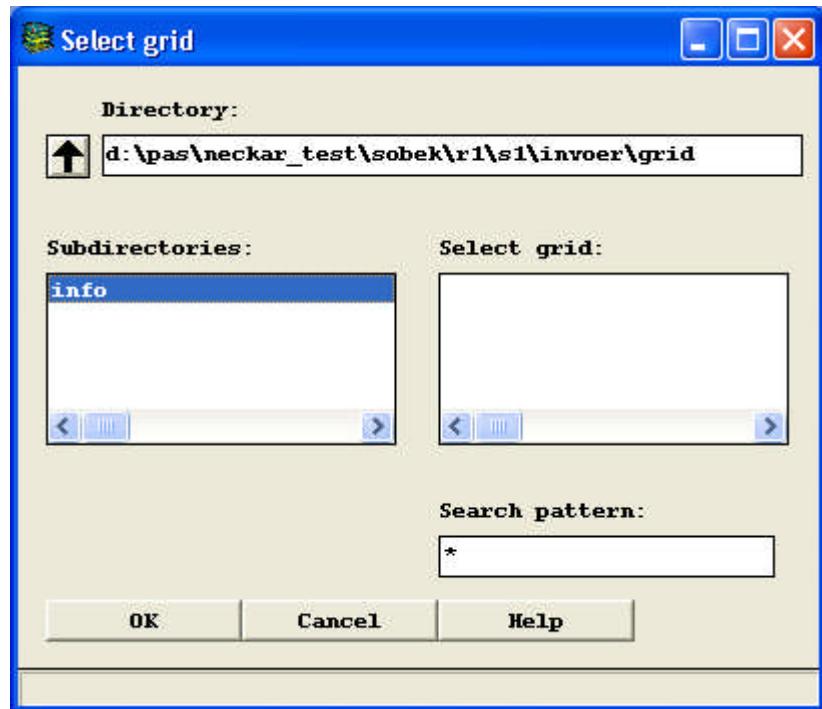
Coverages: Available coverages in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



### Select grid

---

Use this window to select a grid for the previous window

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Select grid: Available grids in the current directory.

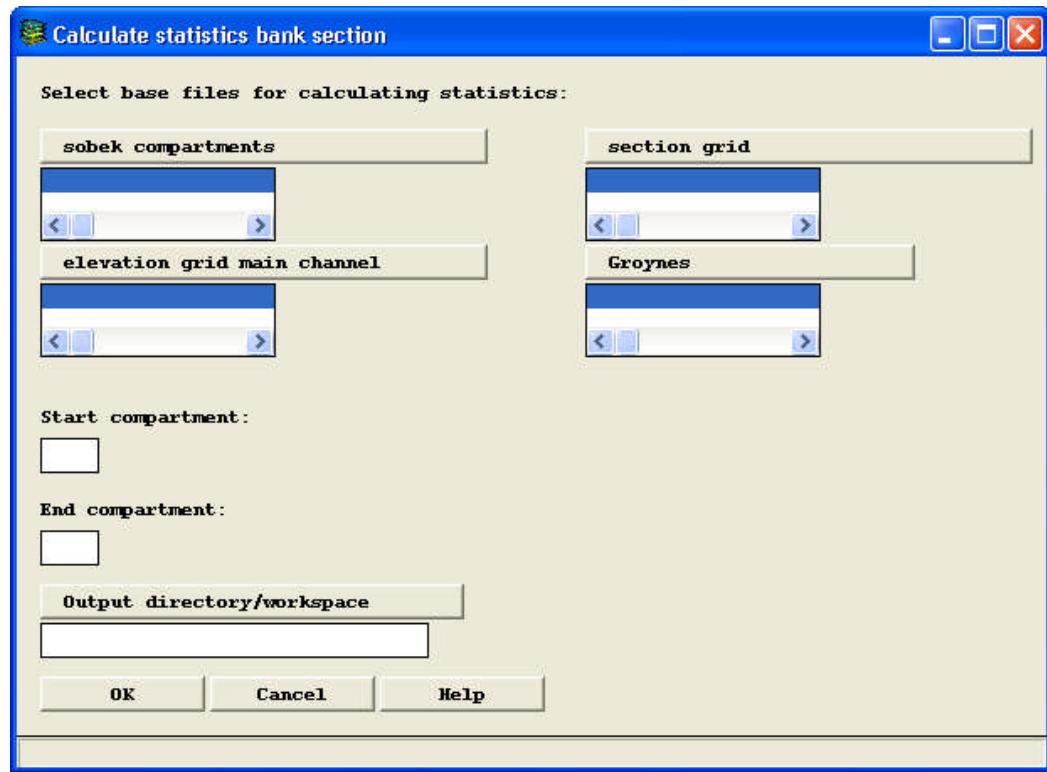
Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.

#### 11.4.1.3.2 Bank section



##### Calculate statistics bank section

Use this function to calculate elevation statistics for the bank and/or groyne section. The created ASCII file gives five elevation percentages for each compartment (100 - 99 - 5 - 1 - 0).

SOBEK compartments: Select the polygon file with SOBEK compartments (e.g. sobekvak).

Section grid: Select the section grid (e.g. secties).

Elevation grid main channel:

Select the grid with floodplain elevation data (e.g. hoogzom).

Groynes: Select line and point coverage with groynes (e.g. krib).

Start/end compartment: Enter the start and end compartment numbers between which calculations are to be performed.

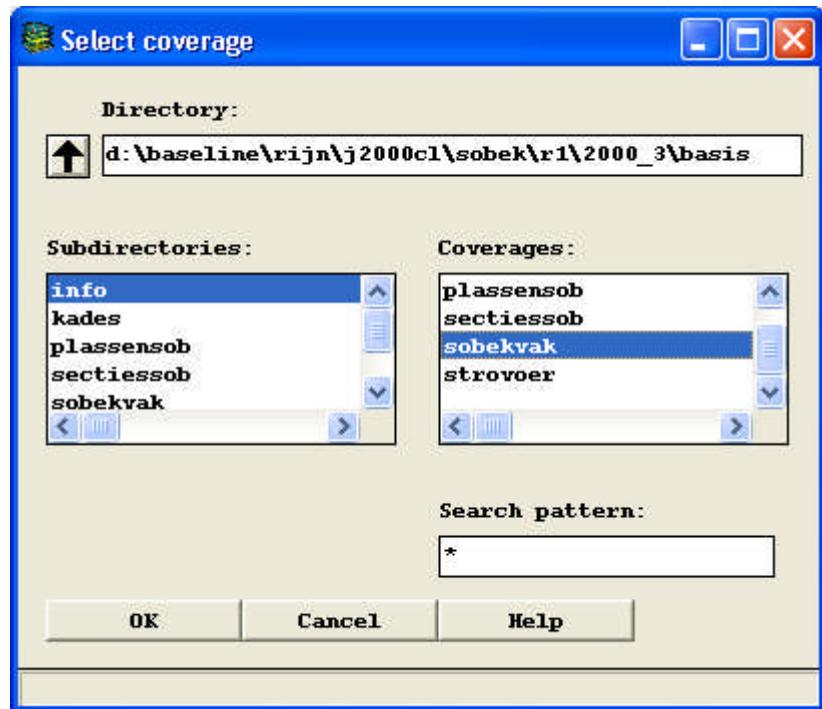
Output directory/workspace:

Select the schematization directory containing the "basis" subdirectory where the output files are created.

OK: Starts the elevation statistics calculation.

Cancel: The menu is closed.

Help: This screen.



### Select coverage

---

Use this window to select a coverage for the previous page.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

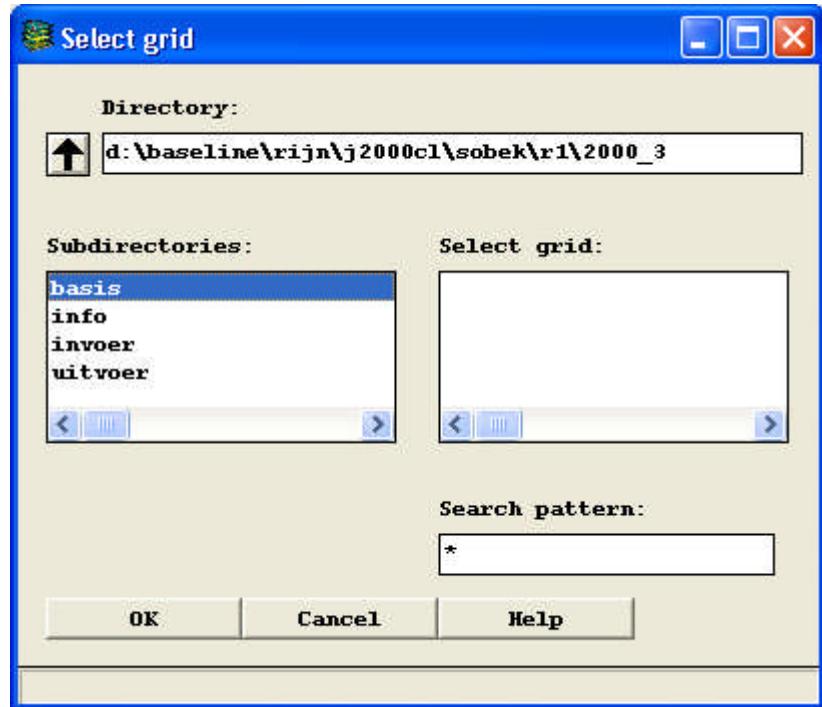
Coverages: Available coverages in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



### Select grid

---

Use this window to select a grid for the previous window

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Select grid: Available grids in the current directory.

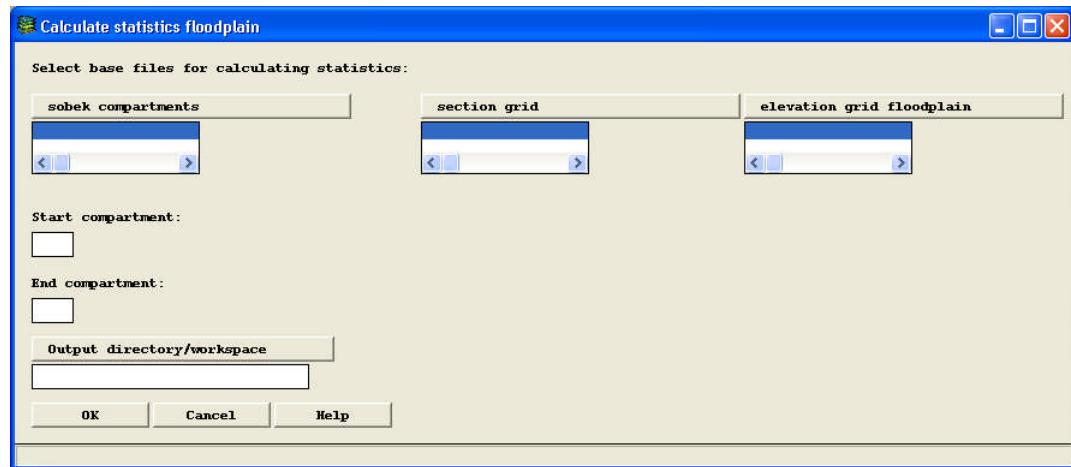
Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.

### 11.4.1.3.3 Floodplain



#### Calculate statistics floodplain

Use this function to calculate elevation statistics for the floodplain section.

The created ASCII file gives five elevation percentages for each compartment (100 - 99 - 5 - 1 - 0).

SOBEK compartments: Select the polygon file with SOBEK compartments (e.g. sobekvak).

Section grid: Select the section grid (e.g. secties).

Elevation grid floodplain: Select the grid with floodplain elevation data (e.g. hoogwin).

Start/end compartment: Enter the start and end compartment numbers between which calculations are to be performed.

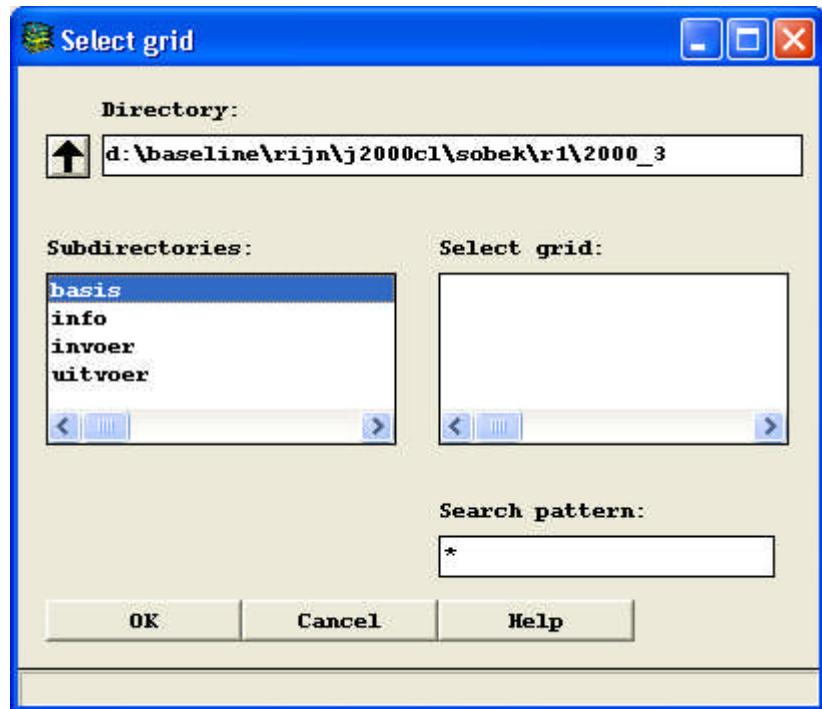
Output directory/workspace:

Select the schematization directory containing the "basis" subdirectory where the output files are created.

OK: Click OK to start calculating elevation statistics.

Cancel: The menu is closed.

Help: This screen.



### Select grid

---

Use this window to select a grid for the previous window

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Select grid: Available grids in the current directory.

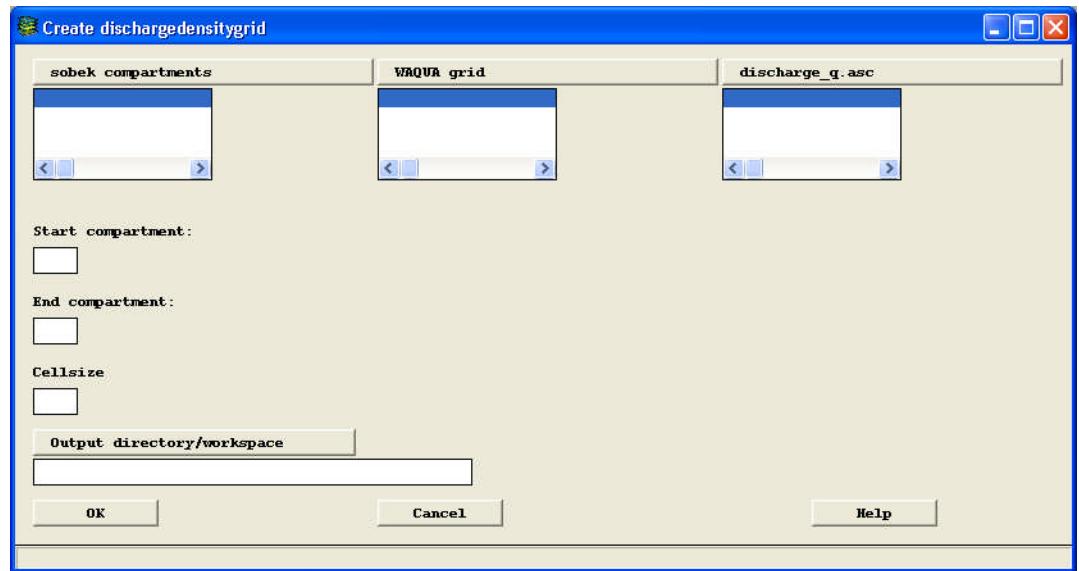
Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.

#### 11.4.1 Discharge Density Grid



##### Create dischargedensitygrid

Use this function to create a discharge density grid with discharge densities in the calculation points of an irregular WAQUA grid being converted to a regular grid.

SOBEK compartments: Select the polygon file with SOBEK compartments (e.g. sobekvak).

WAQUA grid: Select a WAQUA grid (e.g. roos-ws\_v).

discharge\_q.asc: Select the discharge density ASCII file (e.g. discharge\_q.asc).

Start/end compartment: Enter the start and end compartment numbers between which calculations are to be performed.

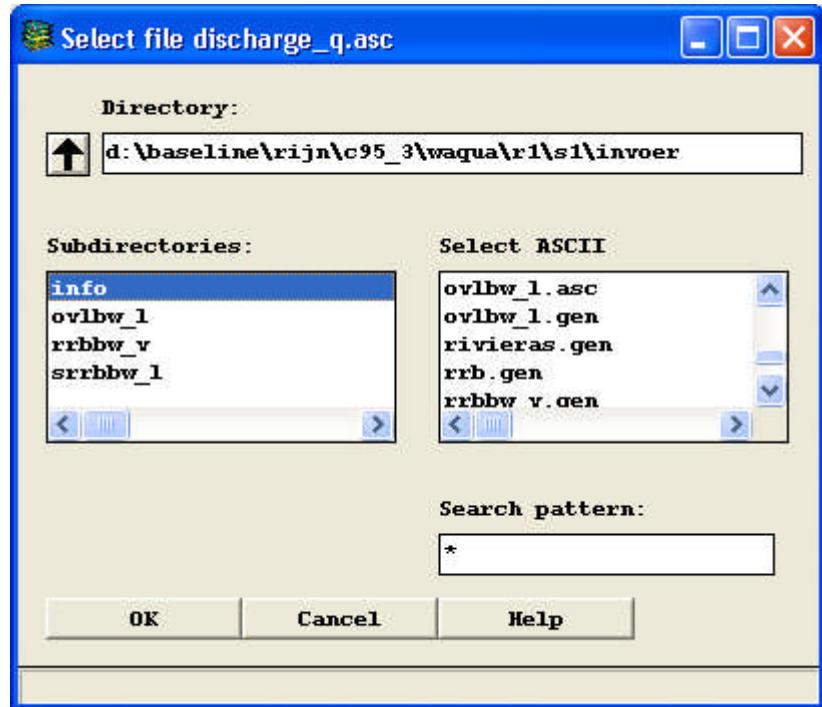
Cell size: Enter the cell size (in metres).

Output directory/workspace: Select the schematization directory containing the "basis" subdirectory where the output files are created.

OK: Click OK to start creating the discharge density grid.

Cancel: The menu is closed.

Help: This screen.



### Select file discharge\_q.asc

---

Use this window to select an ASCII file for the previous page.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Select ASCII: Available files in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

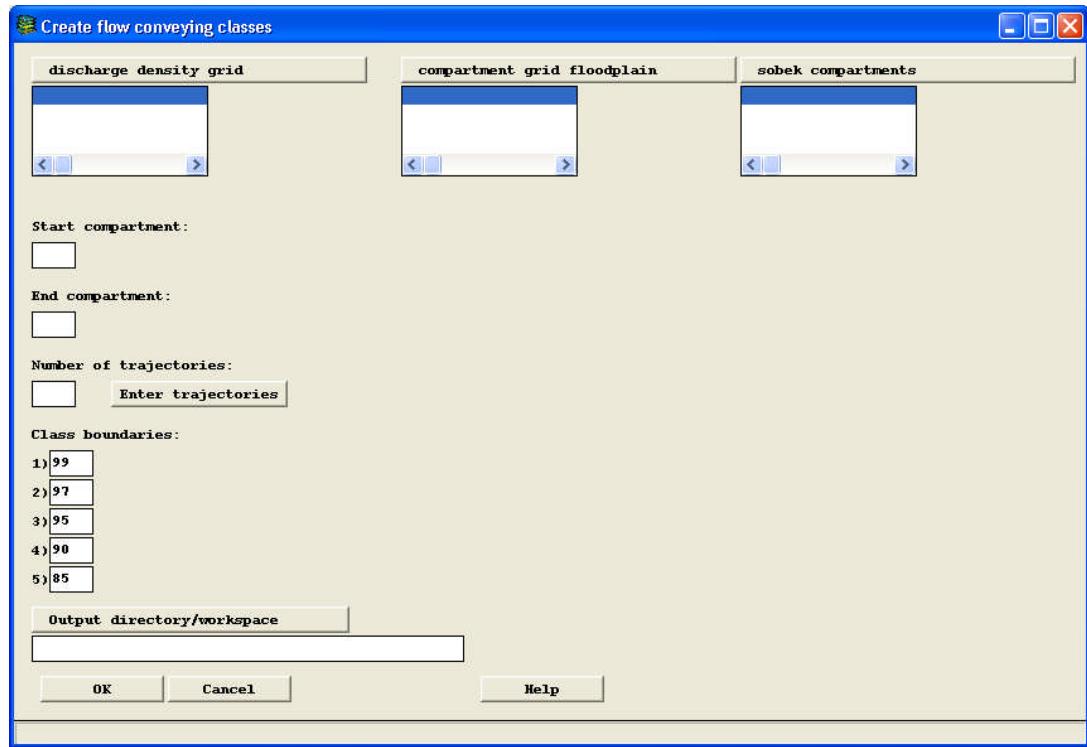
OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.

## 11.4.2 Flow conveyance and retention

### 11.4.3.1 Flow Conveyance Classes



#### Create flow conveyance classes

Use the "Create flow conveyance classes" function to make a grid in which the amount of flow conveyance is presented in five classes.

Discharge density grid: Select the discharge density grid created with the "Create discharge density grid" option.

Compartment grid floodplain: Select the SOBEK compartment grid named "VAKWIN".

SOBEK compartments: Select the polygon file with SOBEK compartments (e.g. sobekvak).

Start/end compartment: Enter the start and end compartment numbers between which calculations are to be performed.

Number of trajectories: Number of trajectories entered.

Enter trajectories: Use this button to open the "Enter trajectories" window. Enter the trajectories into which the river is to be divided. A trajectory is that part of a river in which discharge remains stable under permanent discharge conditions.

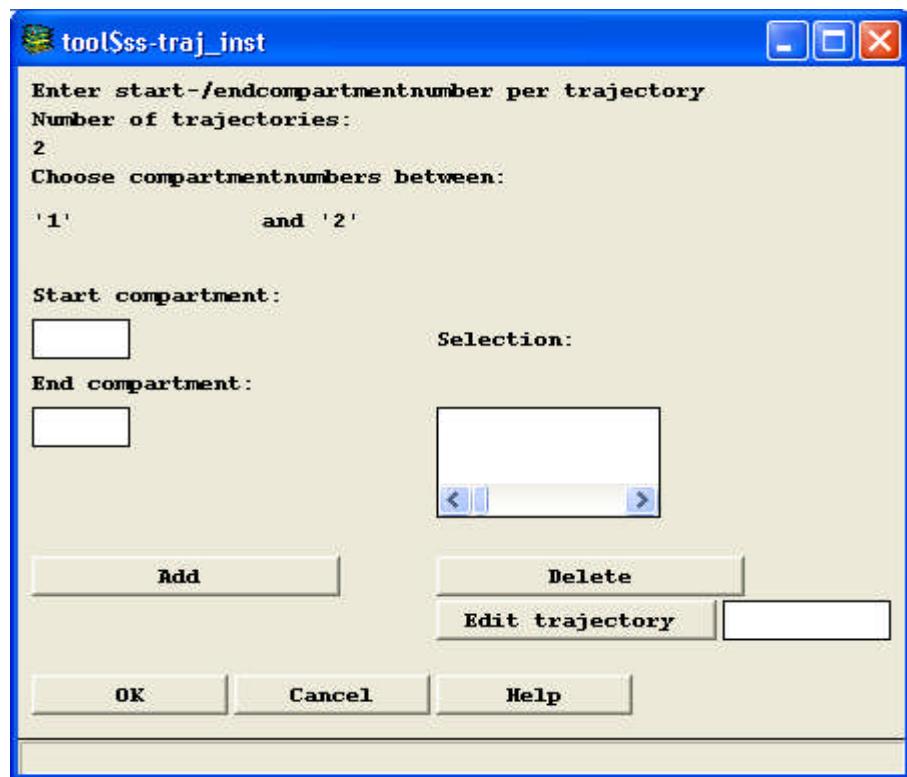
Class boundaries: Enter the five class boundaries in percentages, starting with the highest.

Output directory/workspace: Select the schematization directory containing the "basis" subdirectory where the output files are created.

OK: Starts creating flow conveyance classes.

Cancel: The menu is closed.

Help: This screen.



#### tool\$ss-traj\_inst

Use the "Enter trajectories" window to enter the trajectories into which the river is to be divided. A trajectory is that part of a river in which discharge remains stable under permanent discharge conditions.

Start/end compartment: Enter the start and end compartment number of a single trajectory.

Selection:

Add: Click this button to add the trajectory compartment numbers to the selection. Repeat this procedure to add more trajectories.

Delete: Click this button to delete a trajectory.

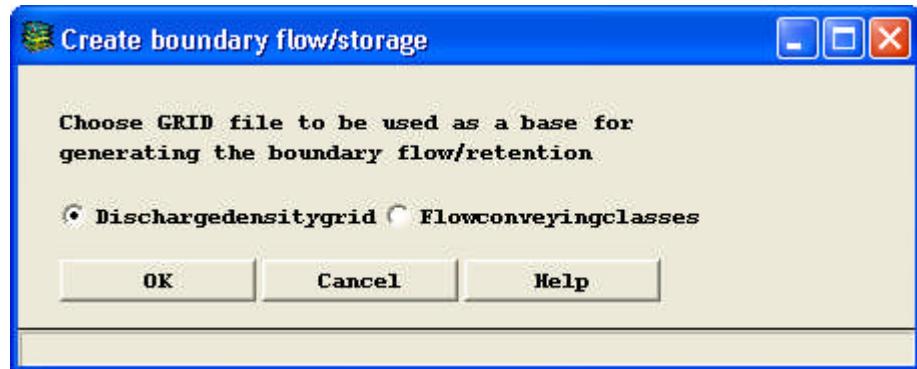
Edit trajectory: Click this button to edit the trajectory's start and/or end compartment number.

OK: All trajectories are selected.

Cancel: The menu is closed.

Help: This screen.

#### 11.4.3.2 Flow conveyance and retention



##### Create boundary flow/storage

Use the "Create boundary flow/storage" window to select whether the conveyance boundary is determined by a boundary in an existing conveyance class grid (= quicker) or is to be calculated on the basis of a discharge density grid and a new boundary value.

Discharge density grid: Click this button to determine the conveyance boundary on the basis of a boundary value to be calculated from the discharge density grid.

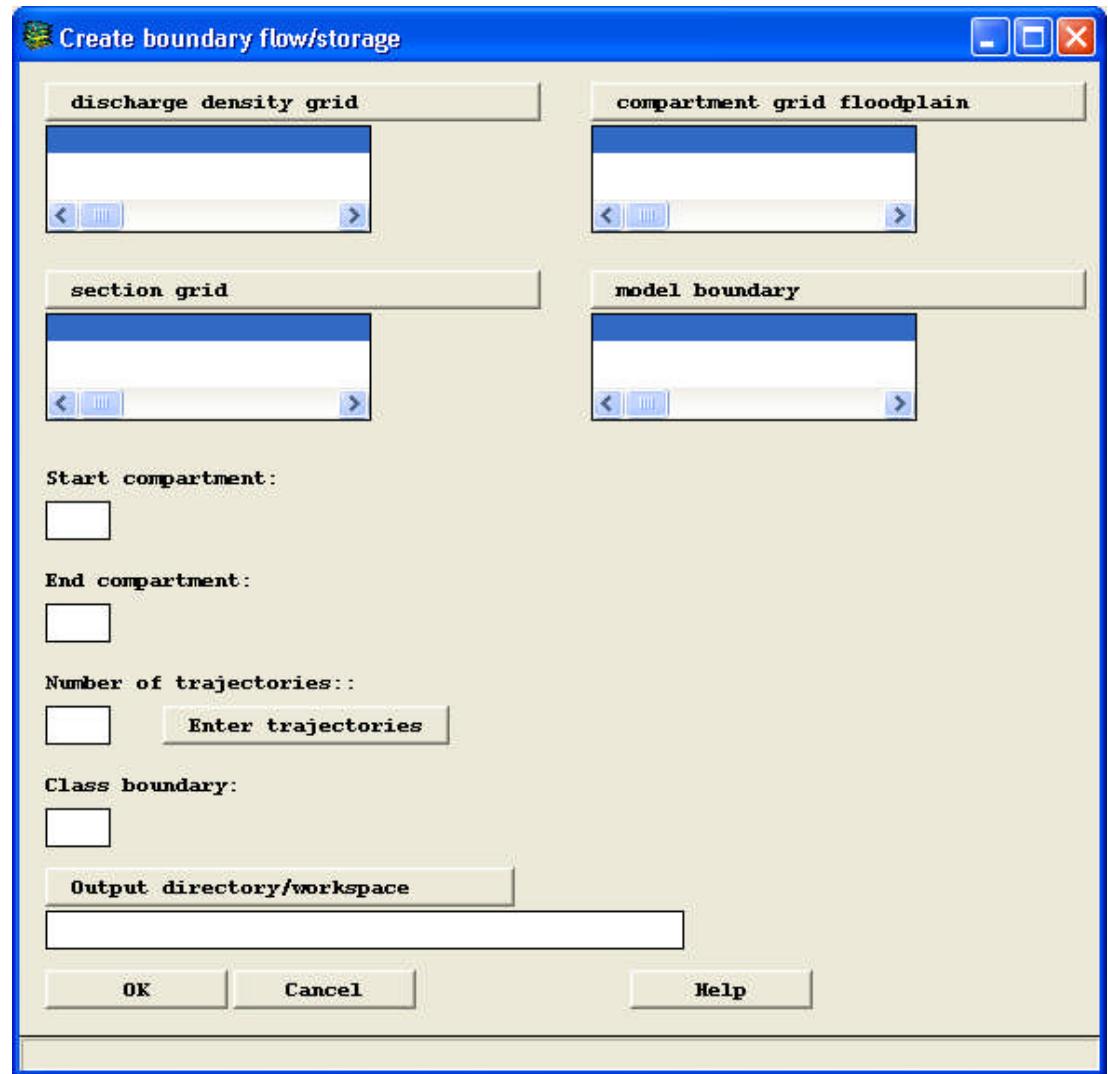
Flow conveyance classes: Click this button to determine the conveyance boundary on the basis of an existing boundary from the conveyance class grid.

OK: This button opens the second create boundary flow/storage window.

Cancel: The menu is closed.

Help: This screen.

## Selection: Discharge Density Grid



### Create boundary flow/storage

Use this window to create a grid and a polygon coverage in which the boundary between flow and storage is displayed, based on a discharge density percentage to be indicated for a SOBEK compartment.

Discharge density grid: Select the discharge density grid created with the "Create dischargedensitygrid" option.

Vakwin: Select the SOBEK compartment grid named "VAKWIN".

Sections: Select the section grid named "SECTIES".

Winbed: Select the model boundary (poly) named "WINBED".

Start/end compartment: Enter the start and end compartment numbers between which calculations are to be performed.

Class boundary: Enter the class boundary (as a percentage).

Output directory/workspace:

Select the schematization directory containing the "basis" subdirectory where the output files are created.

OK:

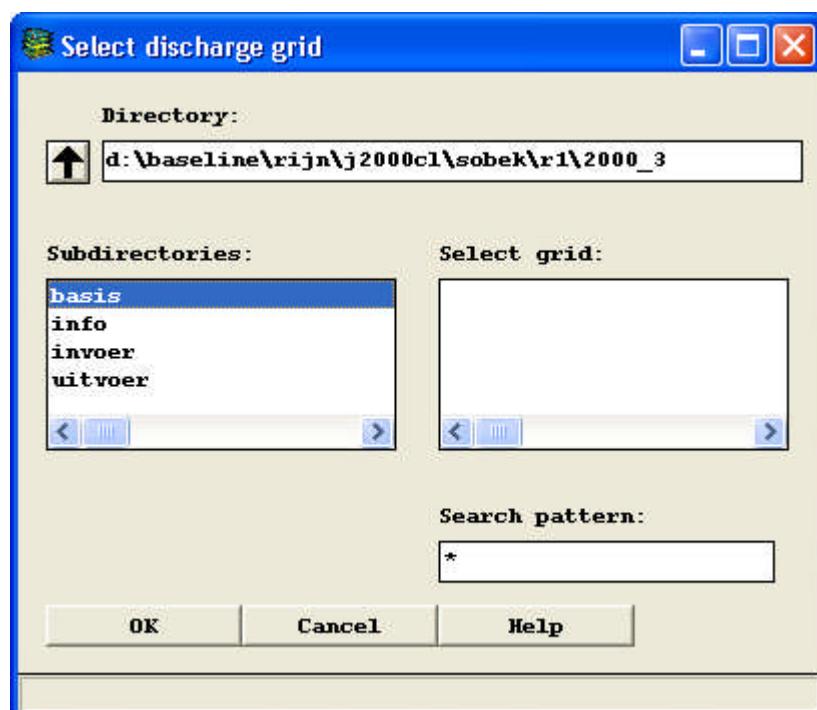
Starts creating the flow conveyance/storage boundary.

Cancel:

The menu is closed.

Help:

This screen.



#### Select discharge grid

---

Use this window to select a grid for the previous window

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

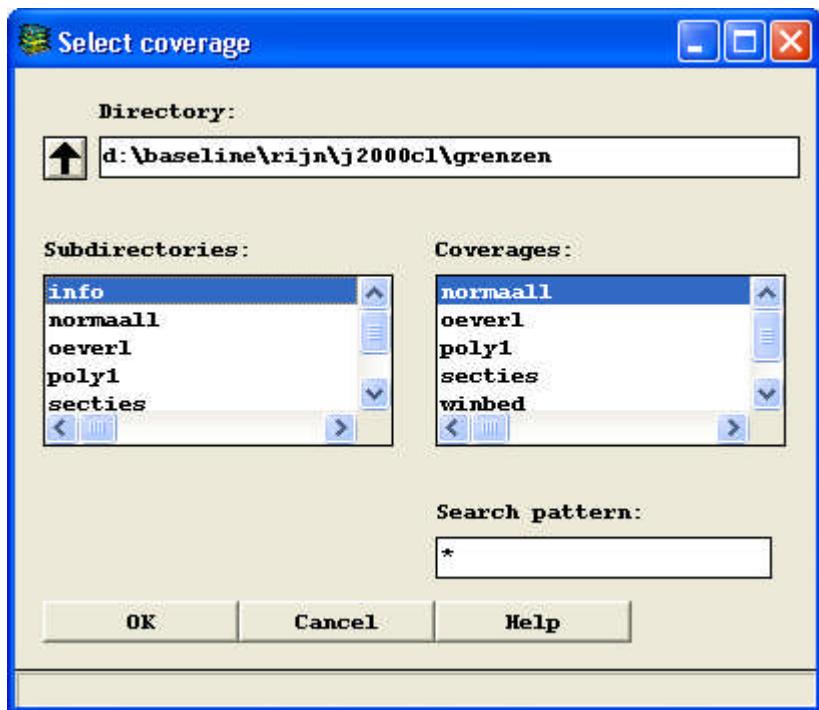
Select grid: Available grids in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



### Select coverage

---

Use this window to select a coverage for the previous page.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

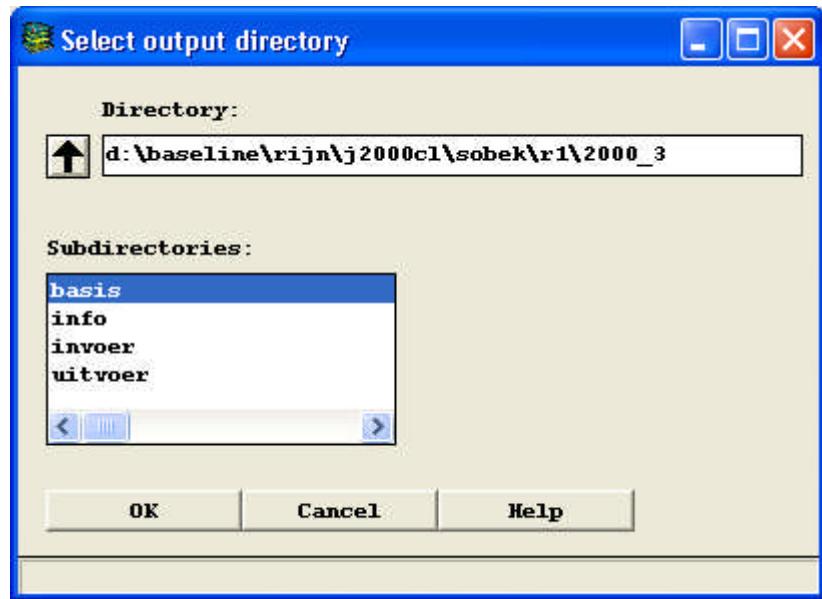
Coverages: Available coverages in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



#### Select output directory

---

Use this function to select a SOBEK schematization. The results are located in this schematization.

Directory: This input field shows the current path.

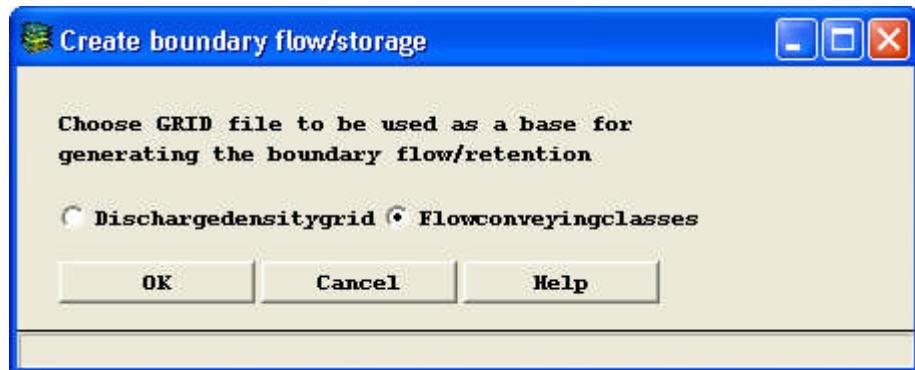
'Arrow Up': Move up one directory.

Subdirectories: Select a directory with a schematization.

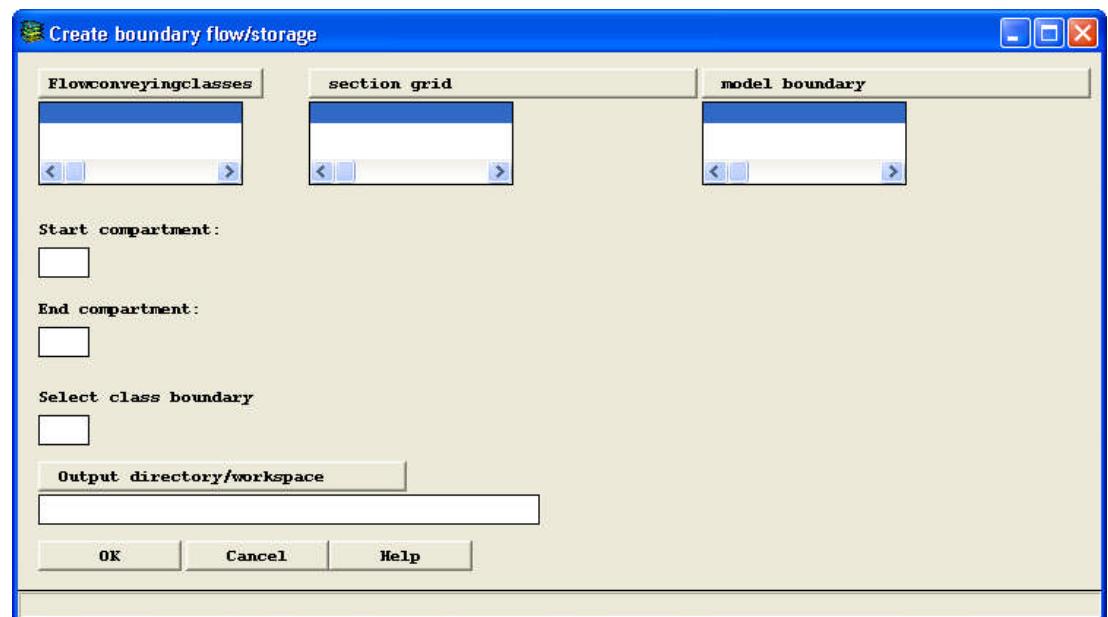
OK: The schematization directory is selected.

Cancel: The menu is closed.

Help: This screen.



Selection: Flow Conveyance Classes



### Create boundary flow/storage

Use this window to create a grid and a polygon coverage in which the boundary between flow and storage is displayed, based on an existing boundary in the flow conveyance class grid.

#### Flow conveyance class grid:

Select the flow conveyance class grid created by means of the "Create flow conveyance classes" function (strklas).

#### Sections:

Select the section grid named "SECTIES".

#### Winbed:

Select the model boundary (poly) named "WINBED".

Start/end compartment: Enter the start and end compartment numbers between which calculations are to be performed.

#### Select class boundary:

Enter the class boundary in percentages (the boundary must be available in the flow conveyance class grid selected).

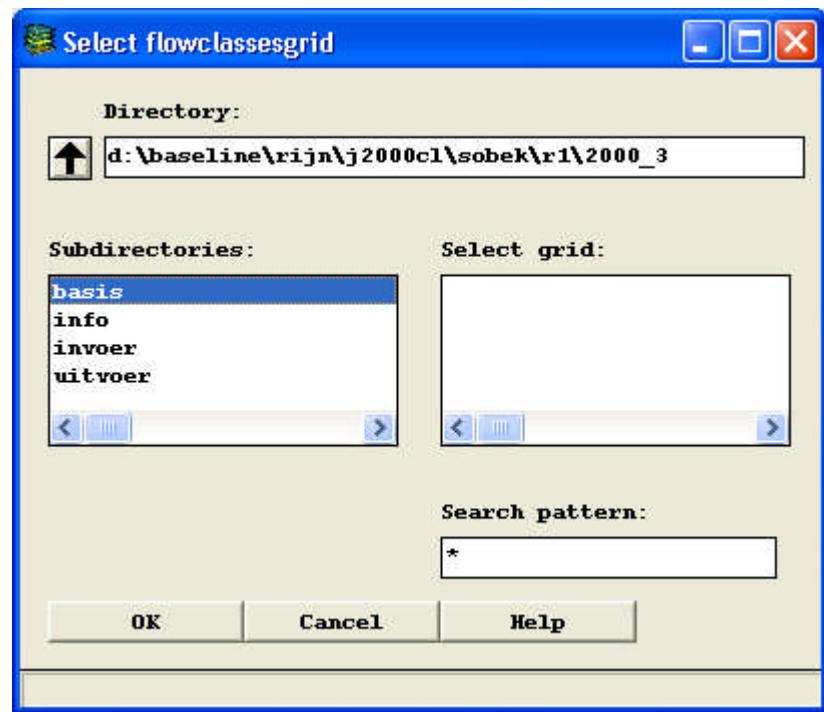
#### Output directory/workspace:

Select the schematization directory containing the "basis" subdirectory where the output files are created.

OK: Starts creating the flow conveyance/storage boundary.

Cancel: The menu is closed.

Help: This screen.



### Select flowclassesgrid

---

Use this window to select a grid for the previous window

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

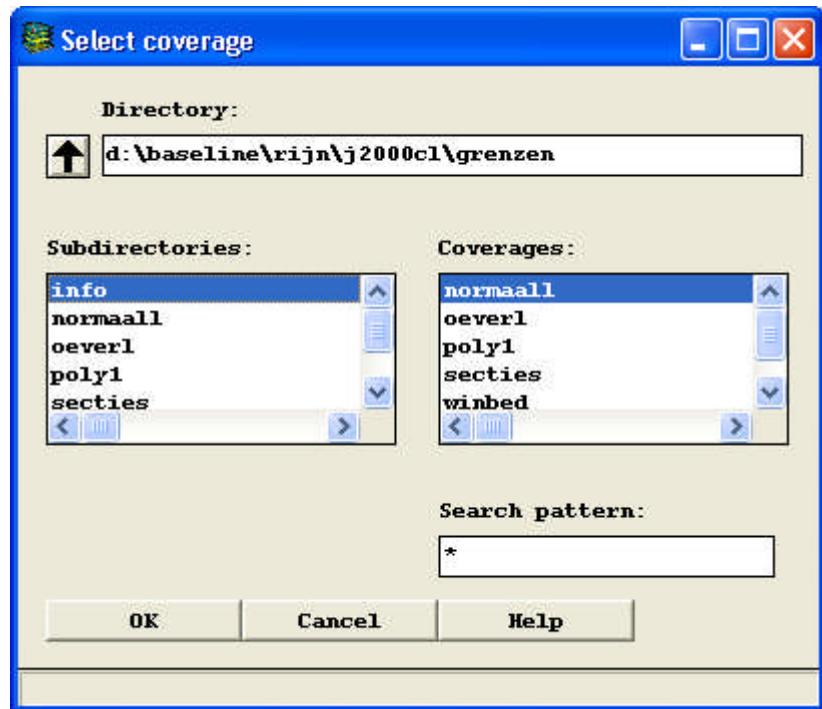
Select grid: Available grids in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



### Select coverage

---

Use this window to select a coverage for the previous page.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

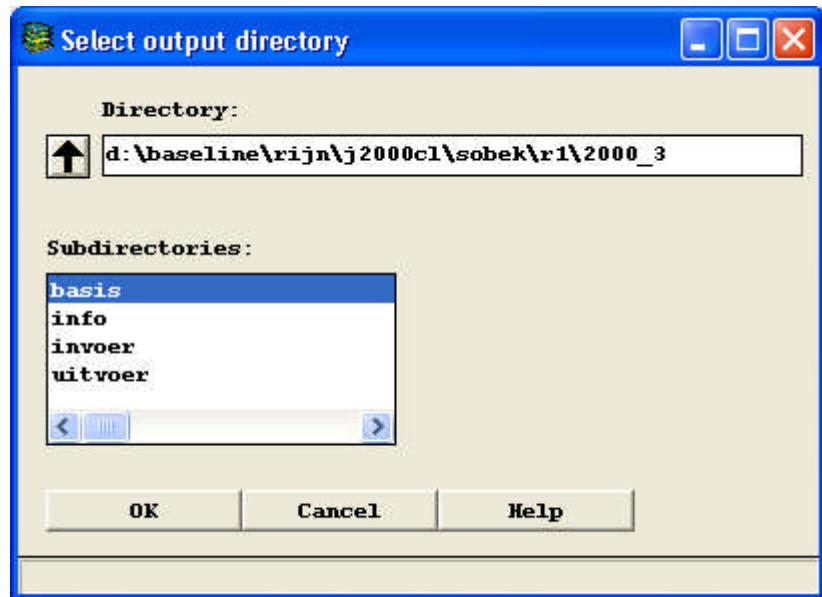
Coverages: Available coverages in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



#### Select output directory

---

Use this function to select a SOBEK schematization. The results are located in this schematization.

Directory: This input field shows the current path.

'Arrow Up': Move up one directory.

Subdirectories: Select a directory with a schematization.

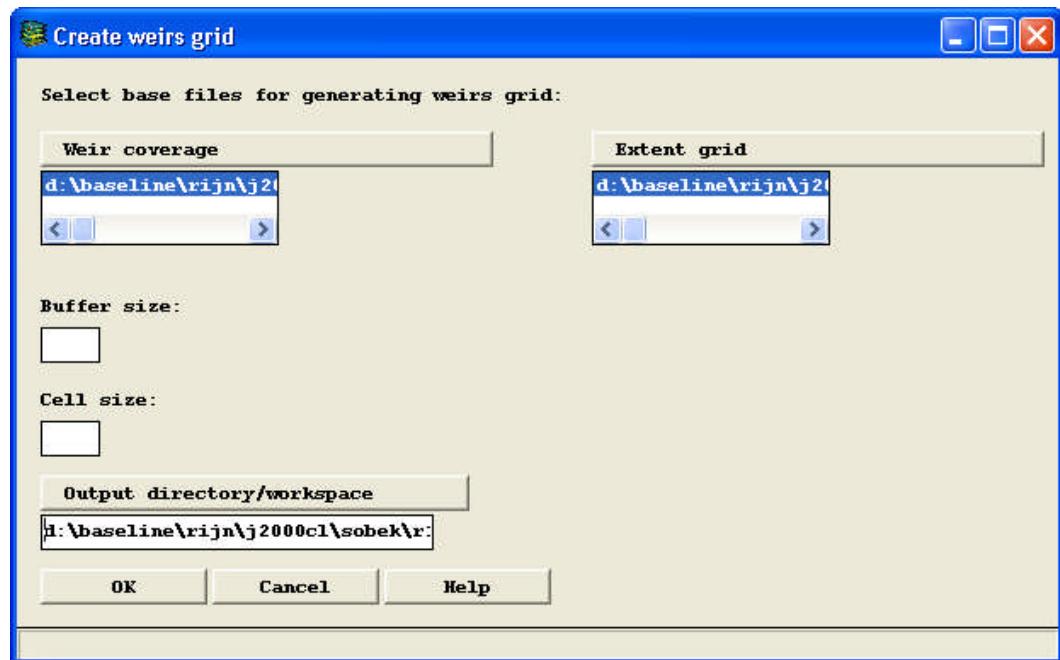
OK: The schematization directory is selected.

Cancel: The menu is closed.

Help: This screen.

## 11.4.4 Create summer dikes

### 11.4.4.1 Weir Grid



#### Create weirs grid

Use this function to create a grid with only elevation values of weirs (dikes etc.); the rest is NODATA.

Weir coverage:

Select the weir coverage (e.g. overlaat).

Extent grid:

Select a grid of which the extent has to be copied by the weirs grid (e.g. hoogwin).

Buffer size:

Enter the distance with which the line elements have to be buffered (one sided, in meters).

Cell size:

Enter the cell size (in metres).

Output directory/workspace: Select the schematization directory containing the "basis" subdirectory where the output files are created.

OK:

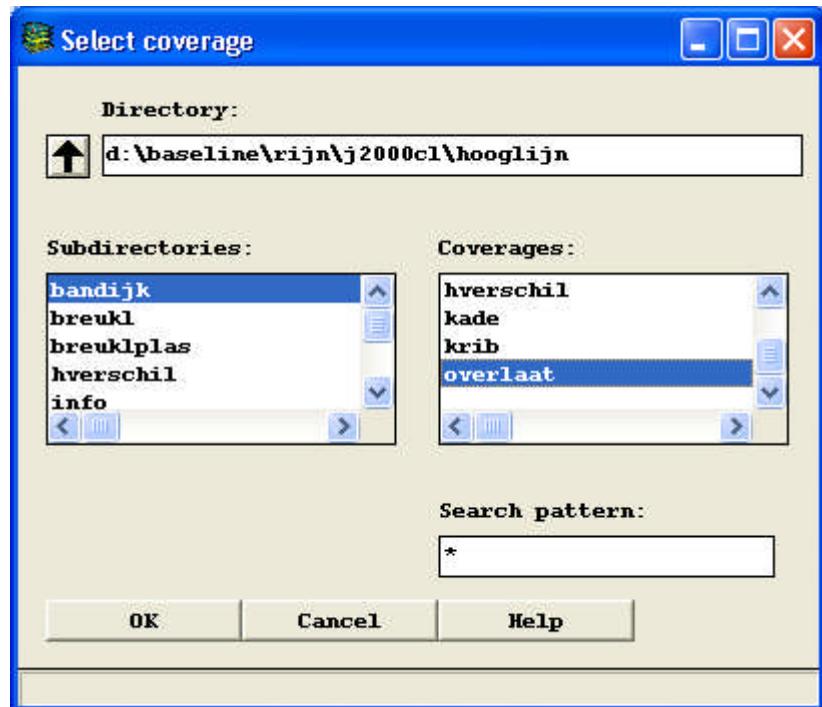
Click OK to start creating the weir grid.

Cancel:

The menu is closed.

Help:

This screen.



### Select coverage

---

Use this window to select a coverage for the previous page.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

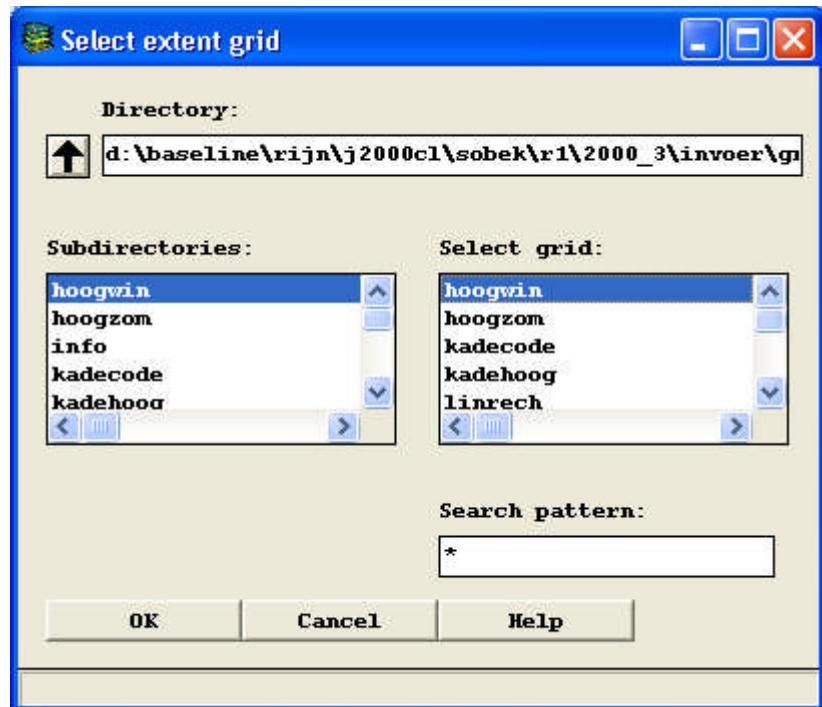
Coverages: Available coverages in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



### Select extent grid

---

Use this window to select a grid for the previous window

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

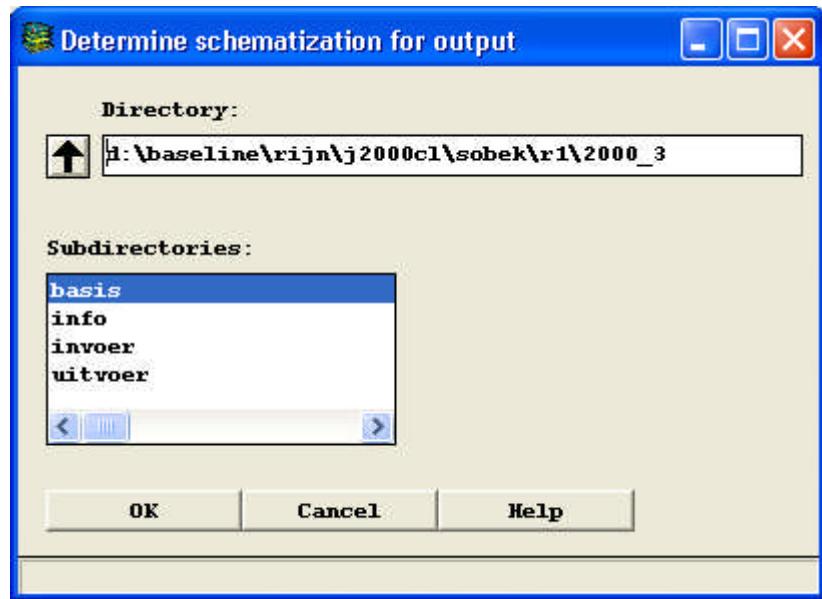
Select grid: Available grids in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



#### Determine schematization for output

---

Use this function to select a SOBEK schematization. The results are located in this schematization.

Directory: This input field shows the current path.

'Arrow Up': Move up one directory.

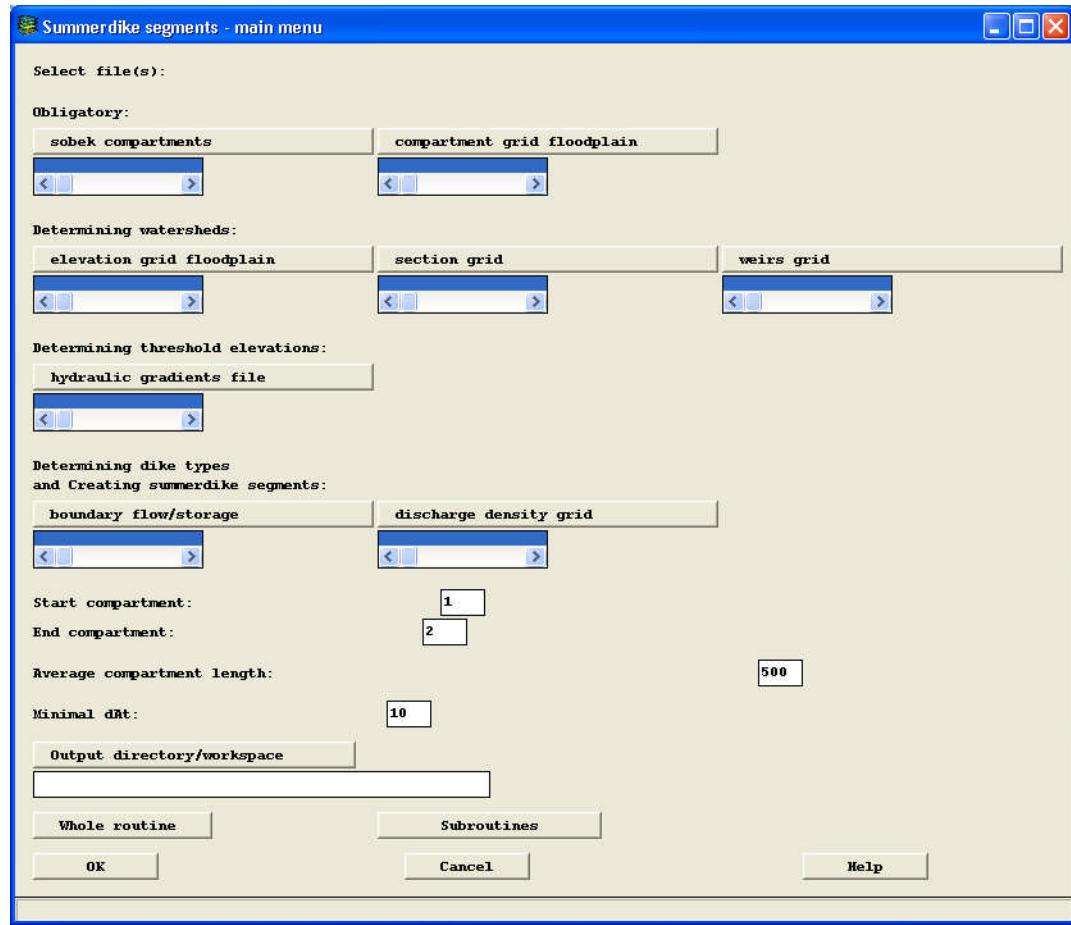
Subdirectories: Select a directory with a schematization.

OK: The schematization directory is selected.

Cancel: The menu is closed.

Help: This screen.

#### 11.4.4.2 Summer dike segments



#### Summerdike segments - main menu

Use this window to create SOBEK summer dike segments.

Select file(s):

Compulsory:

SOBEK compartments: Select the SOBEK compartments polygon file (e.g. sobekvak).

Compartment grid floodplain: Select the grid with floodplain compartments (e.g. vakwin).

Determining watersheds:

Elevation grid floodplain: Select the grid with floodplain elevation data (e.g. hoogwin).

Section grid:

Select the section grid (e.g. secties).

Weirs grid:

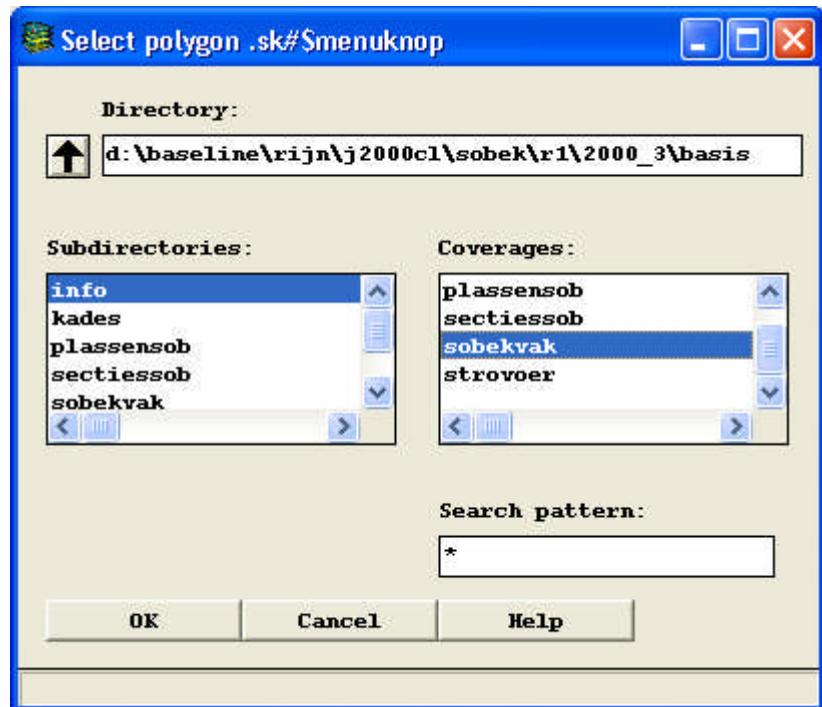
Select the weirs grid (e.g. ol\_grid).

Determining threshold elevations

Hydraulic gradients file: Select the ASCII file with discharge/water level relations (e.g. watstand.txt).

Determining dike types and Creating summerdike segments:

Boundary flow/storage:	Select the polygon file with the flow/storage boundary (e.g. strovoer).
Discharge density grid:	Select the discharge density grid created with the "Create dischargedensitygrid" option.
Start/end compartment:	Enter the start and end compartment numbers between which calculations are to be performed.
Average compartment length:	The average length of a SOBEK compartment measured along the river axis.
Minimum dAt:	The minimum value of the total flow profile behind summer dikes (in m2) for which segments have to be determined.
Output directory/workspace:	Select the schematization directory containing the "basis" subdirectory where the input files are located and the output files are created.
Whole routine:	The application runs all routines (a popup window shows the settings and absence/presence of basic files).
Subroutines:	The "Subroutine window" is opened and the user can run the subroutines separately.
OK:	Click OK to start the creation of summer dike segments.
Cancel:	The menu is closed.
Help:	This screen.



### Select coverage

---

Use this window to select a coverage for the previous page.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

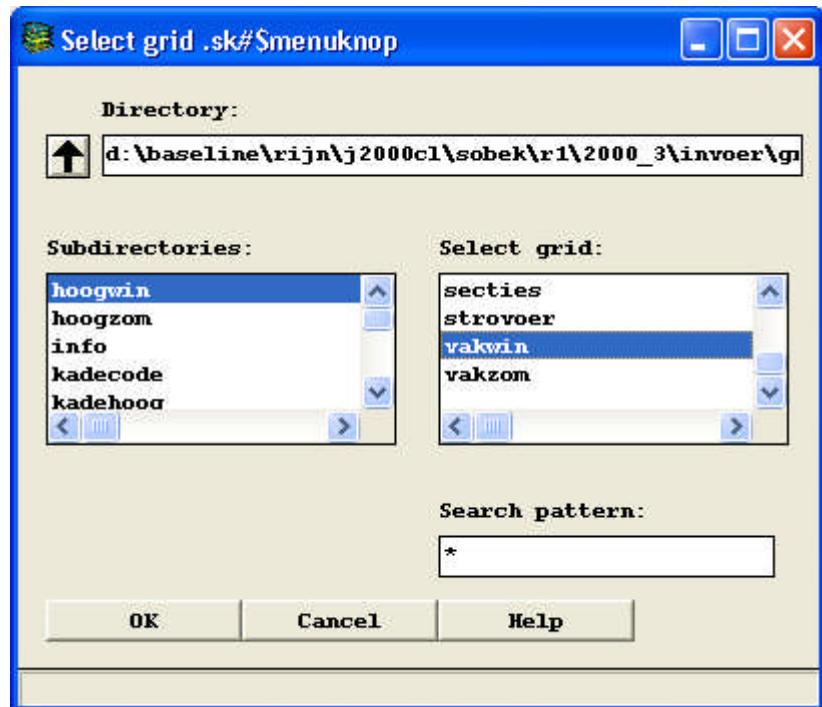
Coverages: Available coverages in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected coverage.

Cancel: Do not make any changes and close the menu.

Help: This screen.



### Select grid .sk#\$menuknop

---

Use this window to select a grid for the previous window

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

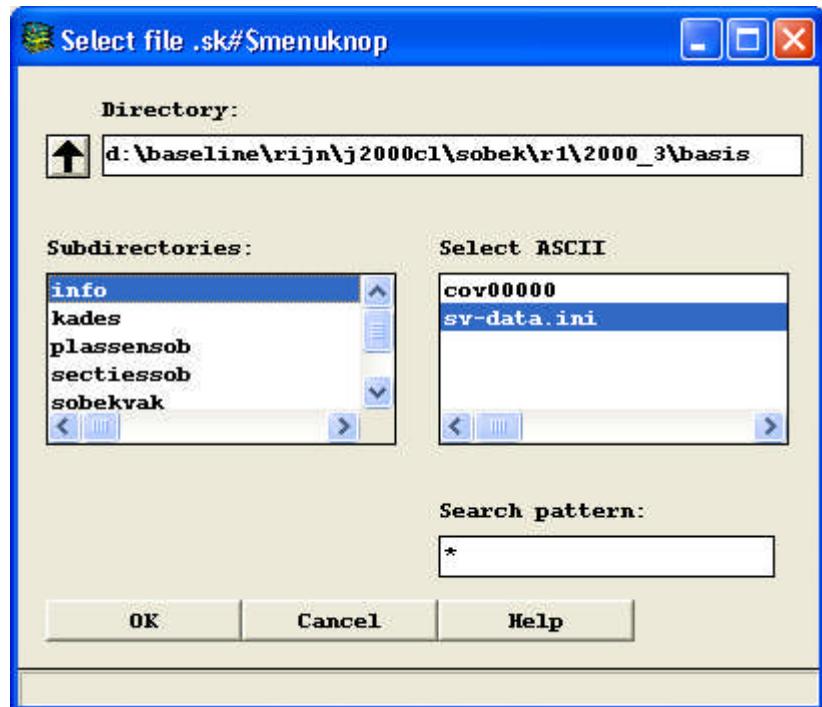
Select grid: Available grids in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected grid.

Cancel: Do not make any changes and close the menu.

Help: This screen.



### Select file .sk#\$menuknop

---

Use this window to select an ASCII file for the previous page.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

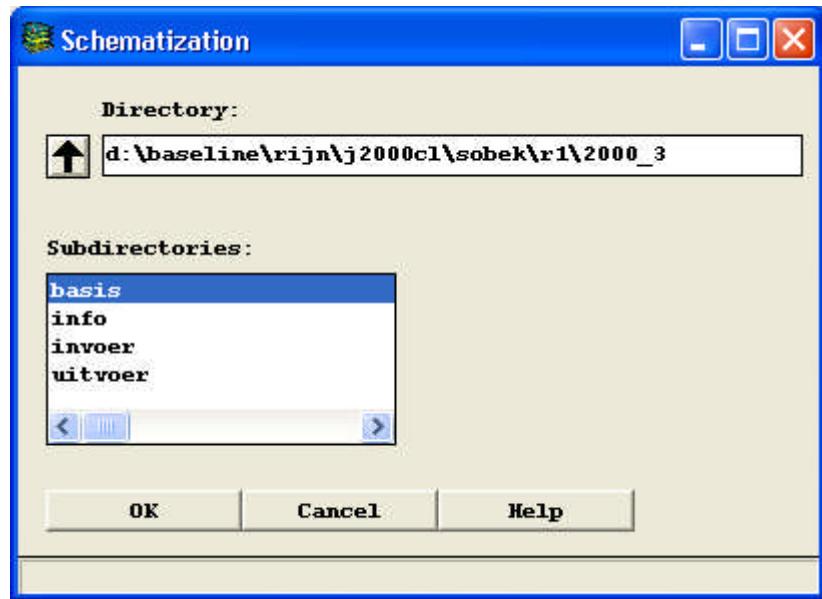
Select ASCII: Available files in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



### Schematization

---

Use this function to select a SOBEK schematization. The results are located in this schematization.

Directory: This input field shows the current path.

'Arrow Up': Move up one directory.

Subdirectories: Select a directory with a schematization.

OK: The schematization directory is selected.

Cancel: The menu is closed.

Help: This screen.



### Subroutines menu

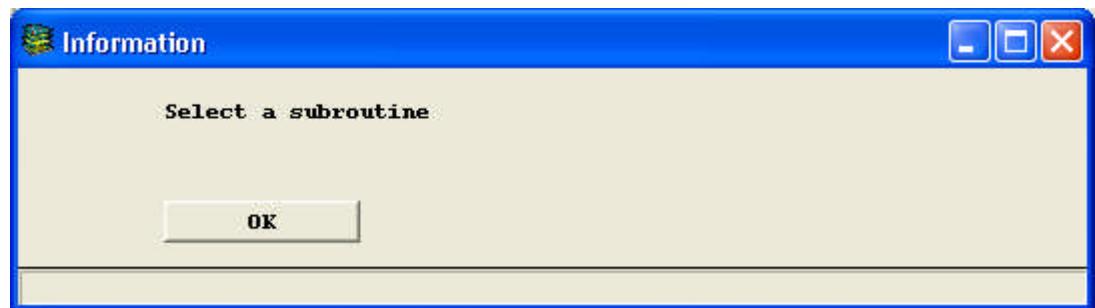
---

Use the Subroutine option to run routines separately. Click the button behind the required routine to select each subroutine separately. Some routines require a previous routine. If this is the case, a popup window will be opened to notify the user.

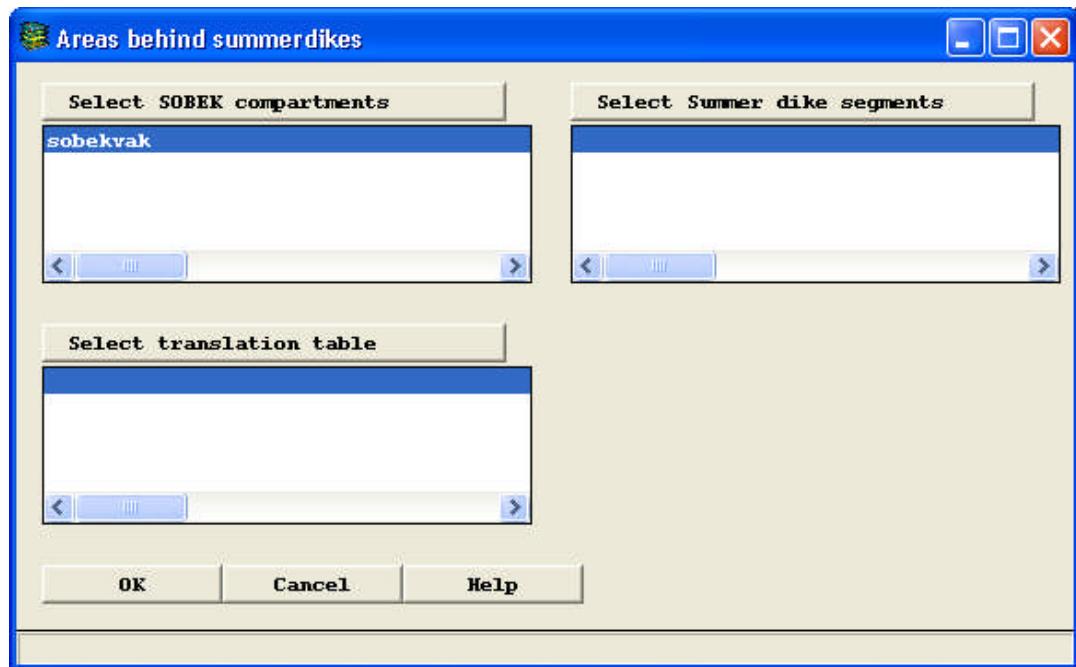
OK: Click OK to confirm the selected subroutines (a popup window displays the settings and the absence/presence of basic files). You are returned to the main window.

Cancel: The menu is closed.

Help: This screen.



#### 11.4.4.3 Areas behind summer dikes



##### Areas behind summerdikes

Use the "Areas behind summer dikes" menu to create a file with areas behind summer dikes from SOBEK compartment files, summer dike segment files and a table with which compartments and summer dike segments are converted into dike types and heights. The polygon data file with areas behind summer dikes contains dike types and heights.

The dike types are:

0 = not behind summer dikes

1 = primary

2 = secondary

Select SOBEK compartments:

Use the next window to select the polygon SOBEK compartment coverage.

Select Summer dike segments:

Use the next window to select the polygon summer dike segment coverage.

Select translation table:

Use the next window to select the ASCII table for conversion of compartments and summer dike segments into dike types and heights.

OK:

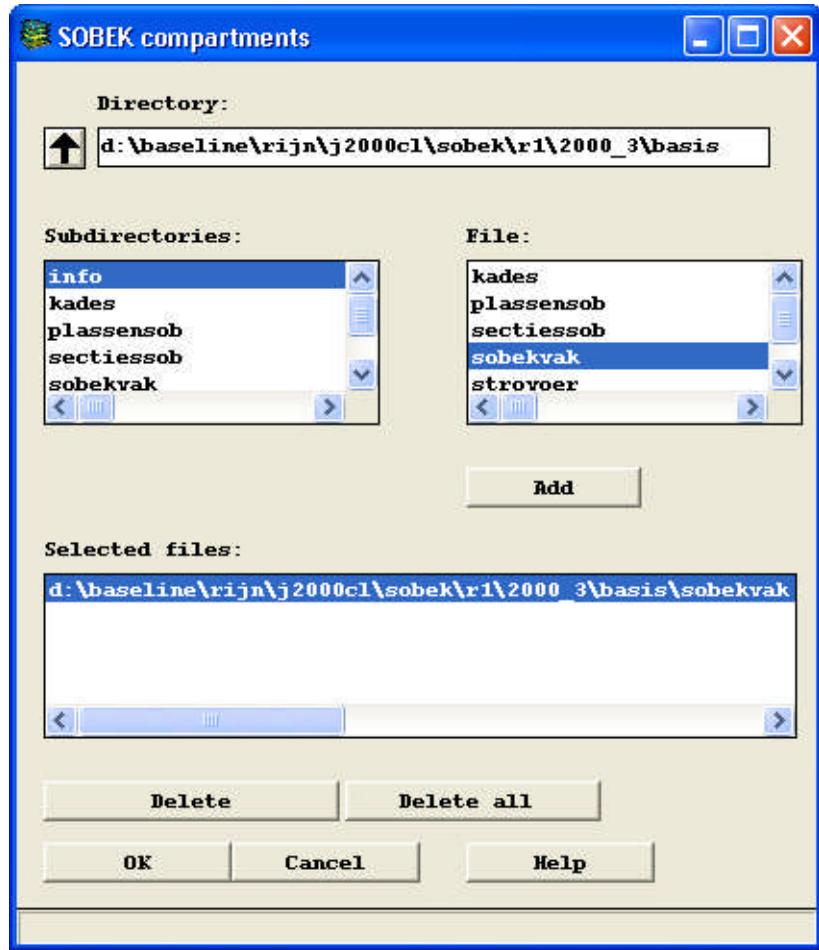
Starts the creation of areas behind summer dikes.

Cancel:

The menu is closed.

Help:

This screen.



### SOBEK compartments

---

Select an input file for the creation of areas behind summer dikes.

Directory: This input field shows the current path.

'Arrow Up': Move up one directory.

Subdirectories: Summary of available subdirectories in the current directory.

File: Summary of available files in the selected subdirectory.

Add: Adds selected file to the list of selected files.

Selected files: List of selected input files.

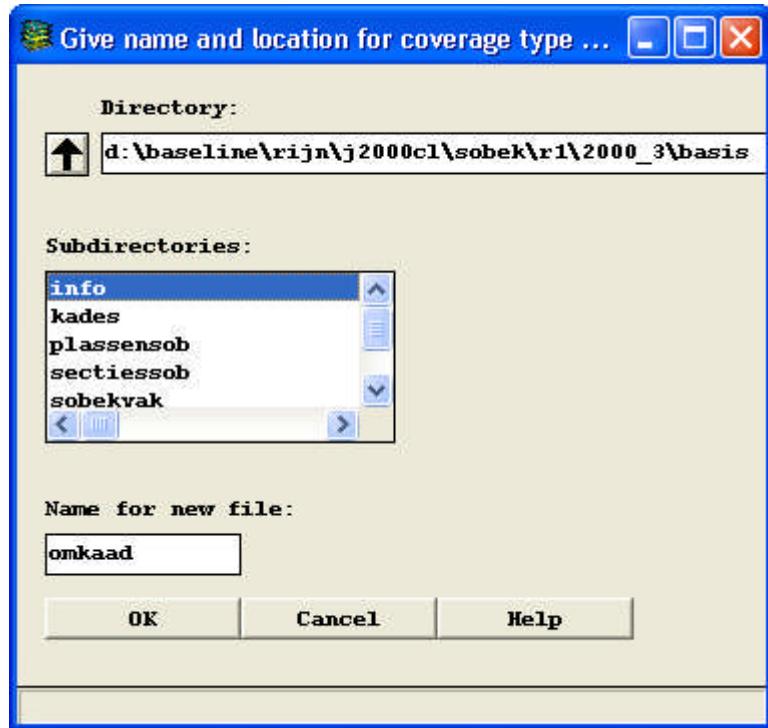
Delete: The selected file is removed from the list.

Delete all: All files are removed from the list.

OK: The selected input file is used for the creation of areas behind summer dikes.

Cancel: Return to previous window. The selection is cancelled.

Help: This screen.



#### Give name and location for coverage type...

---

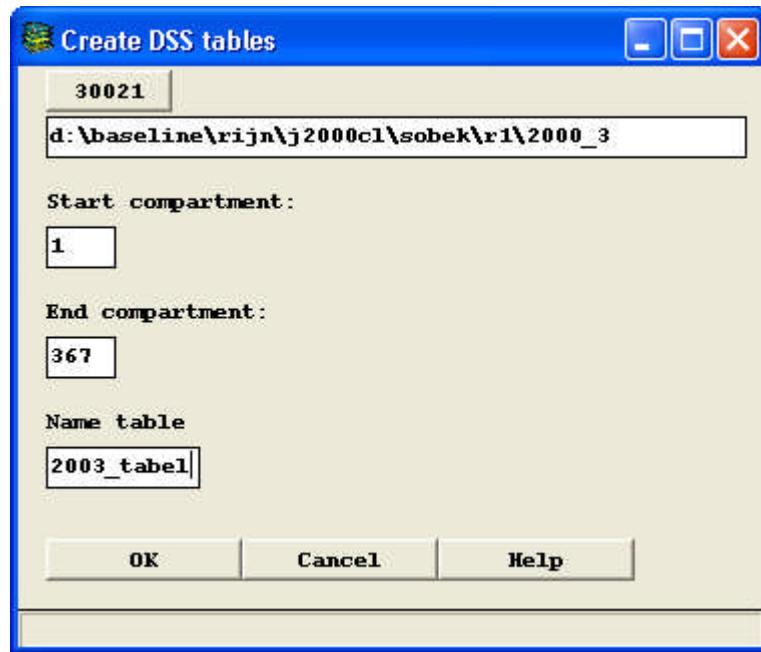
Use this window to select the output directory for areas behind summer dikes. The directory must have the name "basis" and must be located in a SOBEK schematization. It is also possible to enter a file name for the areas behind summer dikes.

Directory:	This input field shows the current path.
'Arrow Up':	Move up one directory.
Subdirectories:	Select the directory in which the areas behind summer dikes file has to be created.
Name for new file:	Enter a new name for the area behind summer dikes file to be created.
OK:	The output directory is selected.
Cancel:	The menu is closed.
Help:	This screen.

#### 11.4.5 SOBEK roughness



#### 11.4.6 Creating DSS tables



##### Create DSS tables

---

Use the "DSS tables" window to create DSS tables.

SOBEK schematization: The next window is used to select the SOBEK schematization file for which the tables are to be created.

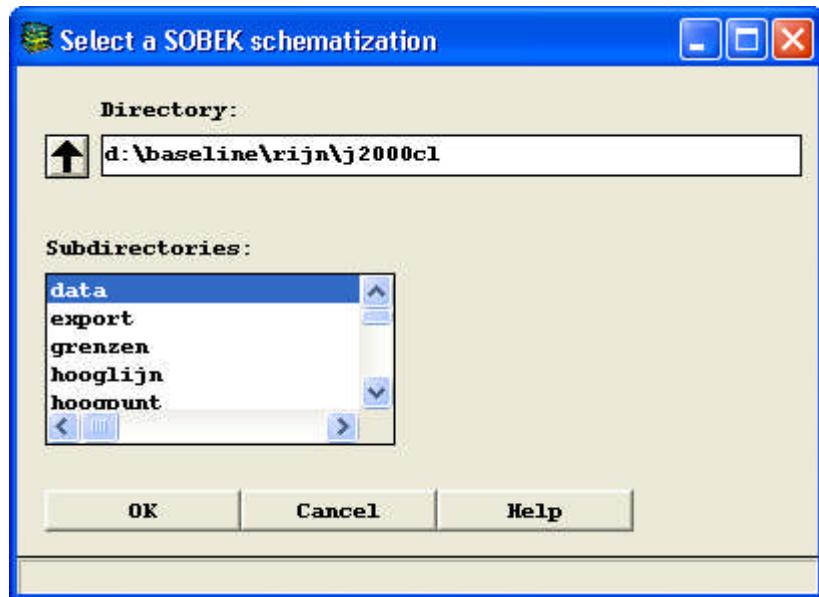
Start/end compartment: Enter the start and end numbers of the compartments for which the DSS tables are to be created.

Name table: Use this field to enter the name of the table.

OK: Starts the creation of DSS tables.

Cancel: The menu is closed.

Help: This screen.



### Select a SOBEK schematization

---

Use this window to select a schematization. The results are located in this schematization.

Directory: This input field shows the current path.

'Arrow Up': Move up one directory.

Subdirectories: Select a directory with a schematization.

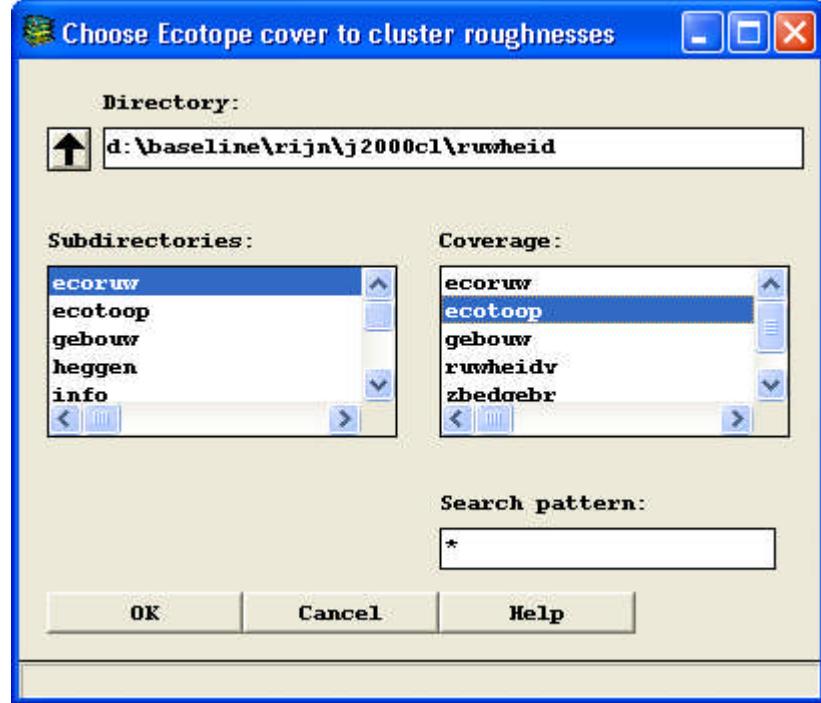
OK: The schematization directory is selected.

Cancel: The menu is closed.

Help: This screen.

## 11.5 Roughness Elements

### 11.5.1 Clustering ecotopes



#### Choose Ecotope cover to cluster roughnesses

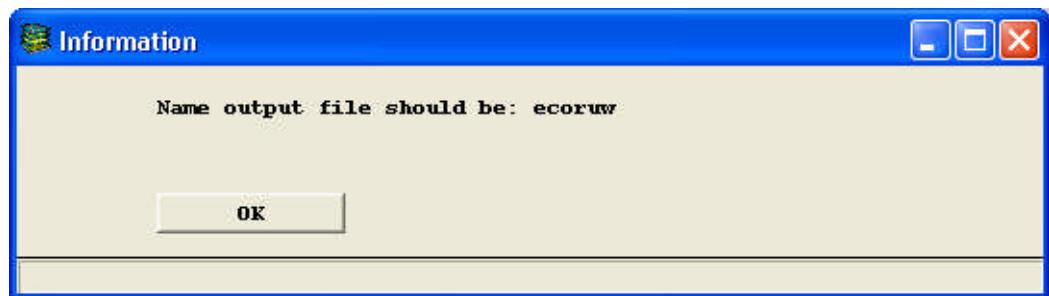
---

Use this function to cluster or generalise ecotopes to so-called "roughness elements" in order to perform WAQUA roughness schematizations. The application assigns a code to these roughness elements.

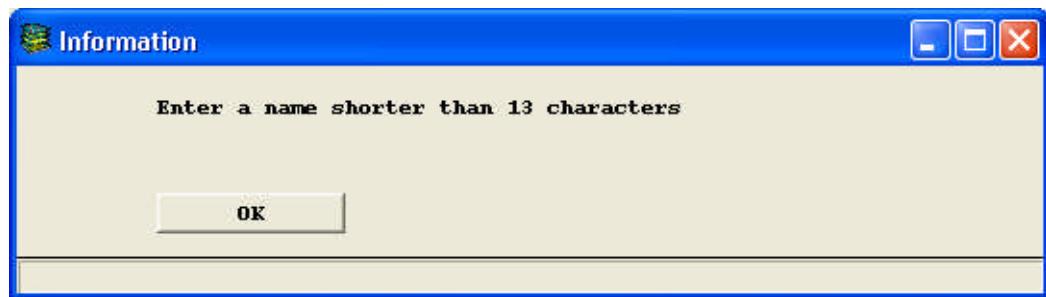
The codes are then converted to k values in WAQUA.

Directory:	This input field shows the current path.
'Arrow Up':	Move up one directory.
Subdirectories:	Subdirectories of the current directory. Choosing a subdirectory will change the current directory.
Coverage:	Summary of all available coverages. Only 'ecotoop' coverages, which are located in the 'ruwheid' workspace, qualify for clustering. The coverage must contain an item with the name 'eco_code' in the .pat.
Search pattern:	Simplify the search procedure by entering one or more letters in combination with an asterisk (*).
OK:	Accept the selected coverage in order to perform ecotope clustering. The new roughness element coverage is automatically named 'ecoruw' and will be located in the same workspace as the source file.
Cancel:	Do not make any changes and close the menu.
Help:	This screen.

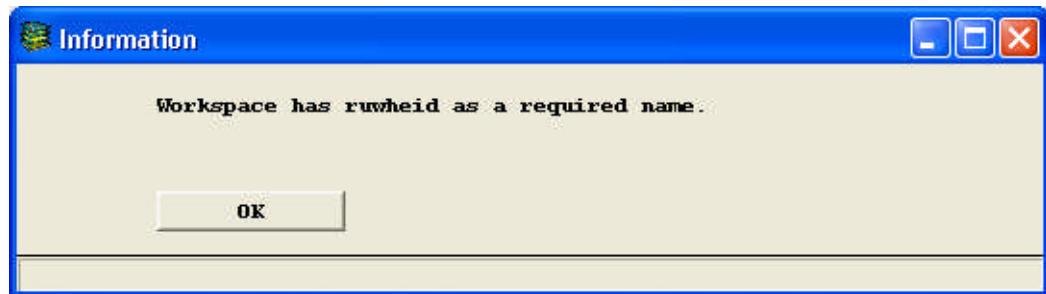
The default name of the coverage to be generated is "ecoruw". This name is compulsory. If a different name is entered, the following message will be displayed:



If a name contains more than 13 characters, the following message is displayed.



Furthermore, the user must, analogous to the protocol, save the "ecoruw" coverage in a workspace named "ruwheid". The user can choose a different variant than the one worked in.

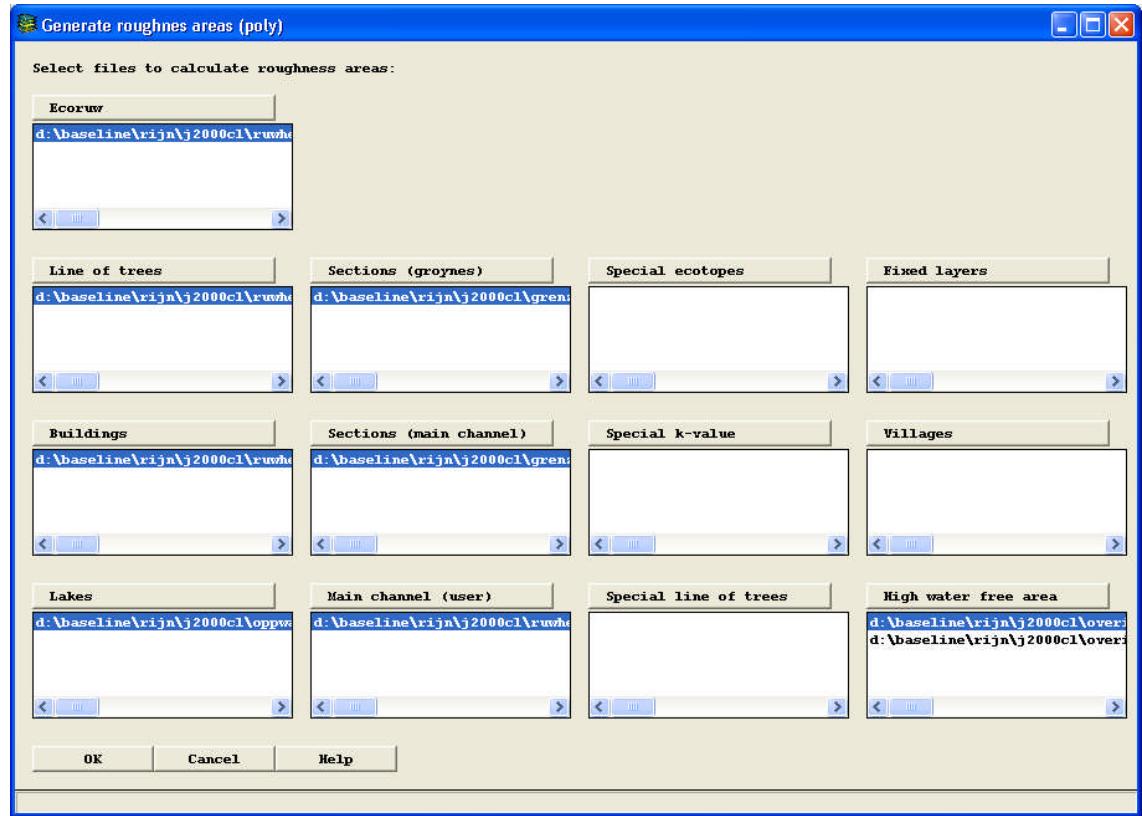


When the "ecoruw" coverage is created, a log file will be kept with the following features:  
Name: ECORUW.LOG

1. Top line with date and time
2. Subsequently, type and name of the input file (including path name).
3. Output file (including path name)
4. Final line with date and time

## 11.5.2 Generating roughness areas

### 11.5.2.1 - Polygon File



#### Generate roughness areas (poly)

This function is the second step in the creation of a file containing so-called "roughness elements" in order to perform WAQUA roughness schematizations. It combines clustered ecotopes (refer to Clustering ecotopes) with polygon elements from a number of basic files, which have an equal effect on the area's roughness. The files include: lines of trees, buildings, lakes, groynes, main channel, user defined main channel, special ecotopes, polygons with special k values, special lines of trees, fixed layers, villages and high-water-free areas. In case of overlap, the clustered ecotopes are replaced by the polygon elements from the files mentioned above and in the order stated above. Prior to the replacement operation, the application assigns a code to the polygon elements. The codes are converted to k values in WAQUA.

#### Select files to calculate roughness areas:

Click one of the buttons to open a window in which files of the corresponding type can be selected. The application will verify whether the selected coverage is indeed a file of the type in question. The list below the button gives an overview of the coverages selected so far.

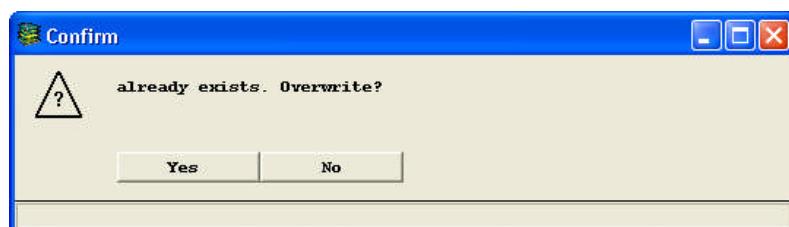
#### Ecoruw:

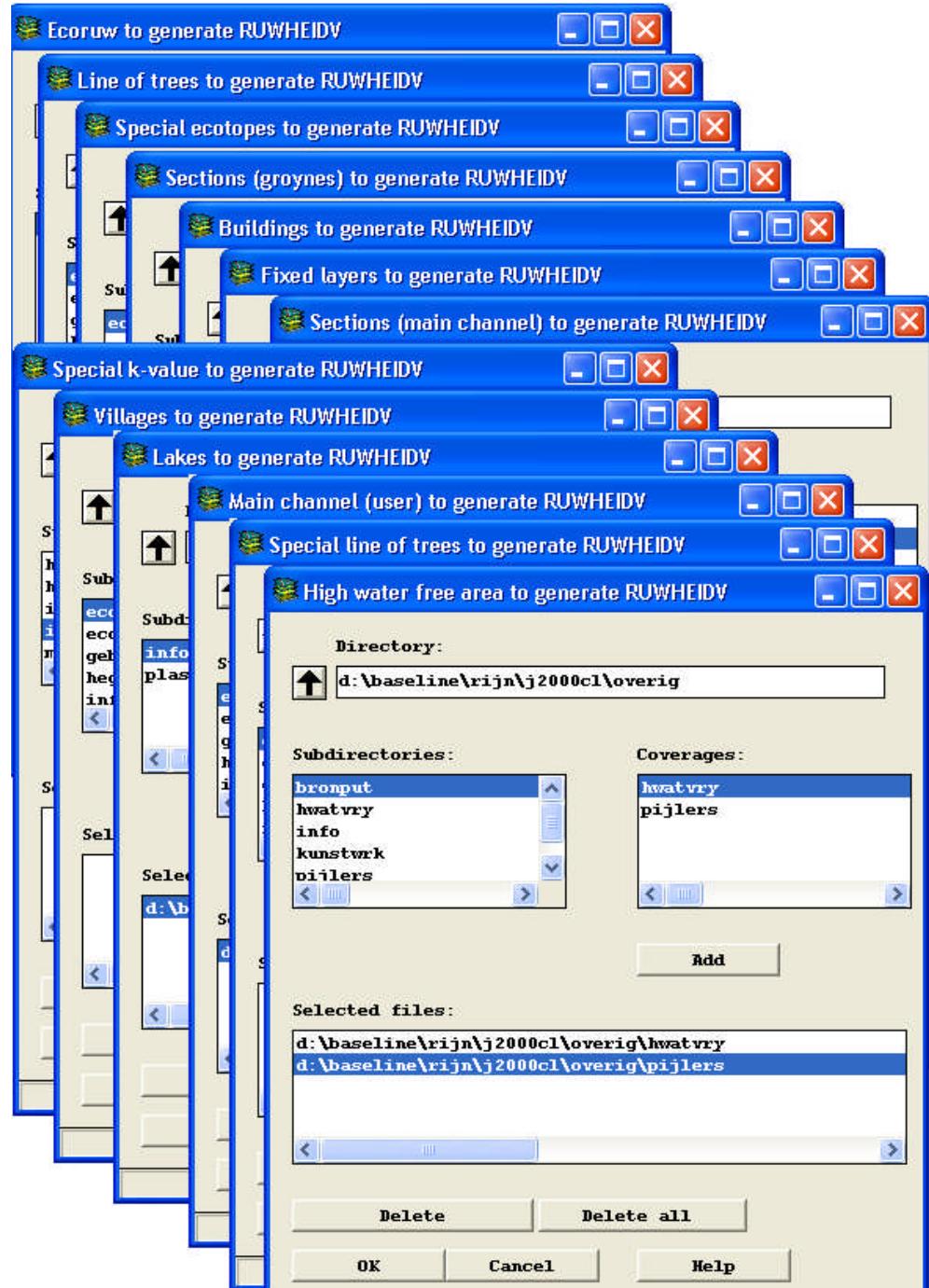
A polygon coverage with the name "ECORUW". This coverage must have been created in "Clustering ecotopes" and is used as basic coverage in compiling the roughness elements.

#### Lines of trees:

A line coverage with the name "LAANBEPL". The application converts this line coverage to polygons with a width of 10 metres.

Buildings:	A polygon coverage with the name "GEBOUW".
Lakes:	A polygon coverage with the name "PLASSEN".
Sections (groynes):	A polygon coverage with the name "SECTIES". Only polygons marked as groyne are included.
Sections (main channel):	A polygon coverage with the name "SECTIES". Only polygons marked as main channel are included.
Main channel (user):	One or more user defined polygon coverages. The RUW_CODE item must be available; the values must be between 400 and 702.
Special ecotopes:	One or more user defined polygon coverages. The RUW_CODE item must be available; the values must be between 751 and 900.
Special k values:	One or more user defined polygon coverages. The RUW_CODE item must be available; the values must be between 201 and 400.
Special lines of trees:	One or more user defined line coverages. The RUW_CODE item must be available; the values must be between 906 and 950.
Fixed layers:	One or more user defined polygon coverages. The RUW_CODE item must be available; the values must be between 51 and 100.
Villages:	One or more user defined polygon coverages. The RUW_CODE item must be available; the values must be between 101 and 200.
High-water-free area:	One or more user defined polygon coverages.
OK:	Accept the selected coverages. The basic coverage is updated with the information from the other coverages. The result is a new coverage with the name RUWHEIDV which is located in the same workspace as the ECORUW basic coverage. The order in which the files are used is the same as the order on the screen. The newer files will replace the other ones.
Cancel:	Do not make any changes and close the menu.
Help:	This screen.





### Coverages to generate RUWHEIDV

Use this window to select input coverages for the creation of a roughness area coverage.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

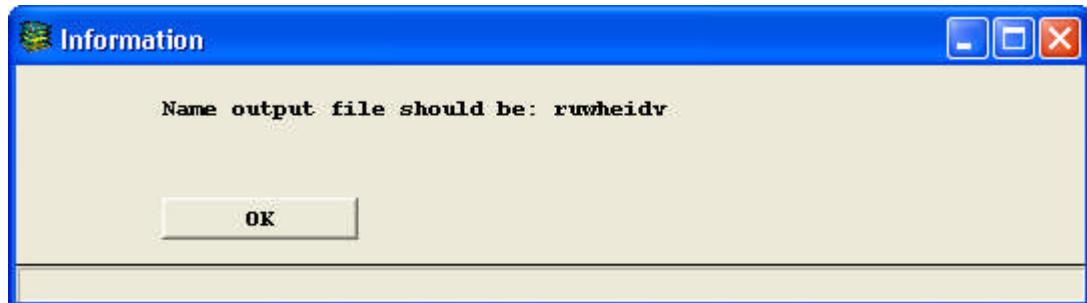
'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

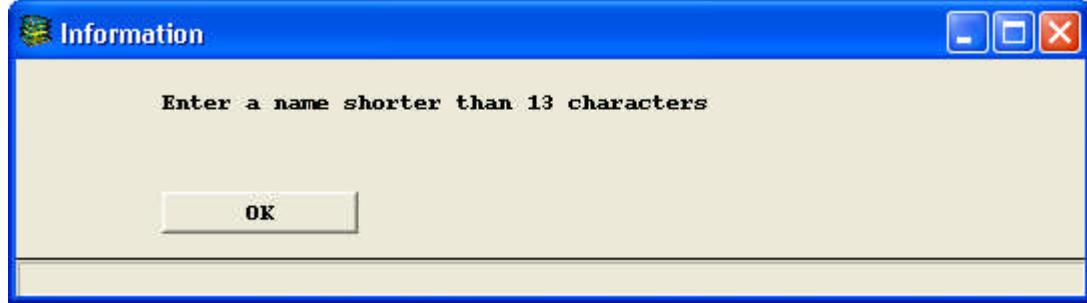
Coverages: Available coverages in the current directory.

Add:	Add the selected coverage to the list. If the coverage does not contain the correct features and/or items, you will be notified and the coverage will not be added to the list.
Selected files:	Gives an overview of all coverages selected so far.
Delete:	Highlight a coverage in the list and next click this button to delete it.
Delete all:	The selected coverages list will be emptied. No coverages are selected anymore.
OK:	Accept the selected file. You are returned to the previous window.
Cancel:	Do not make any changes and close the menu.
Help:	This screen.

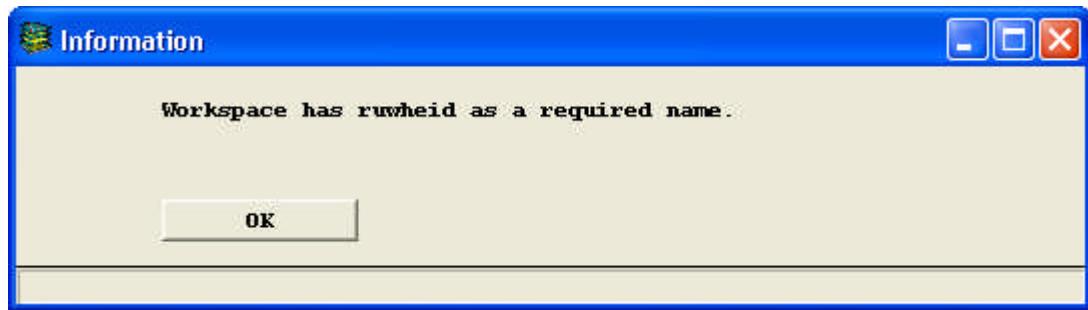
The suggested default name of the coverage to be generated is "ruwheidv". This name is compulsory. If a different name is entered, the following message will be displayed:



If a name contains more than 13 characters, the following message is displayed.



Furthermore, the user must, analogous to the protocol, save the "ruwheidv" coverage in a workspace named "ruwheid". The user can choose a variant different from the one worked in.



During generation of the "ruwheidv" coverage the following features will be written to a log file:  
Name: RUWHEIDV.LOG

1. Top line with date and time
2. Subsequently, type and name of the input file (including path name).
3. Output file (including path name)
4. Final line with date and time

### 11.5.2.2 Line File



#### Generate roughness areas (line)

Use this function to generate the line element file required to make roughness schematizations with WAQUA in combination with the roughness area polygon file (refer to Generate roughness areas (poly)). This line file contains all hedgerows and wooded banks from the digital river map and any (special) hedgerows specified by the user. It is possible to select one or more files for each type. The application assigns a code to the line elements. The codes are then converted to k values in WAQUA.

Select files:

Click one of the buttons to open a window in which files of the corresponding type can be selected. The application will verify whether the selected coverage is indeed a file of the type in question. The list below the button gives an overview of the coverages selected so far.

Hedgerows:

A line coverage with the name "HEGGEN".

Wooded banks:

A line coverage with the name "HOUTWAL".

Special hedgerows:

A hedgerow coverage created by the user. The RUW\_CODE item must be available; the values must be between 961 and 999.

OK:

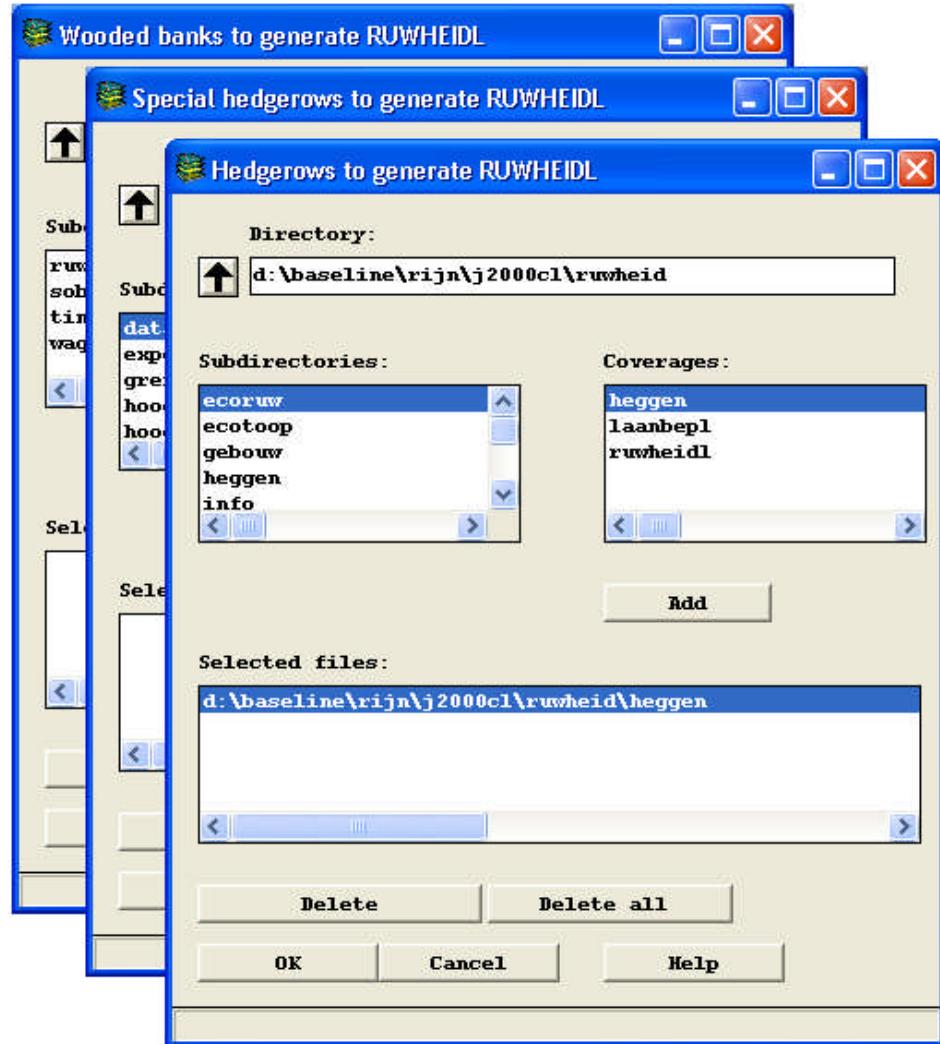
Accept the selected coverages. In the dialog box, specify the output workspace. The workspace must be named RUWHEID. The default name of the coverage to be created is RUWHEIDL. This name cannot be changed. Finally, the elements of the selected coverages are combined to form the new coverage.

Cancel:

Do not make any changes and close the menu.

Help:

This screen.



#### Coverages to generate RUWHEIDL

Use this window to select input coverages for the creation of a roughness line coverage.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Coverages: Available coverages in the current directory.

Add: Add the selected coverage to the list. If the coverage does not contain the correct features and/or items, you will be notified and the coverage will not be added to the list.

Selected files: Gives an overview of all coverages selected so far.

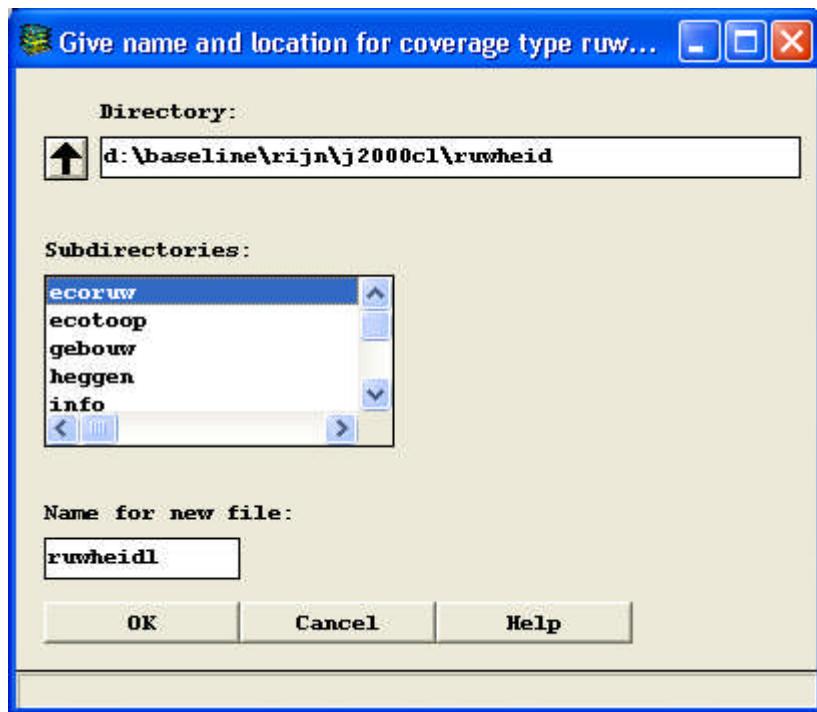
Delete: Highlight a coverage in the list and next click this button to delete it.

Delete all: The selected coverages list will be emptied. No coverages are selected anymore.

OK: Accept the selected file. You are returned to the previous window.

Cancel: Do not make any changes and close the menu.

Help: This screen.



#### Give name and location for coverage type ruw...

---

Current workspace: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing the subdirectory will define the workspace in which the file is to be created.

OK: Accept the selected workspace as the workspace in which the new file will be located. The workspace name sometimes has to meet specific requirements. A workspace with an incorrect name will not be accepted by Baseline.

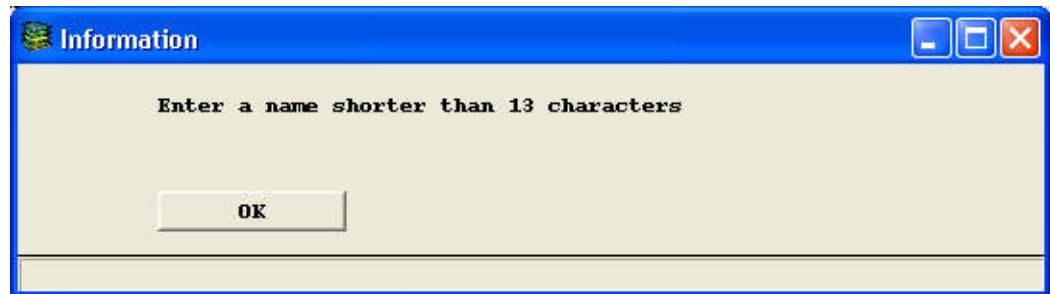
Cancel: Close the menu.

Help: This screen.

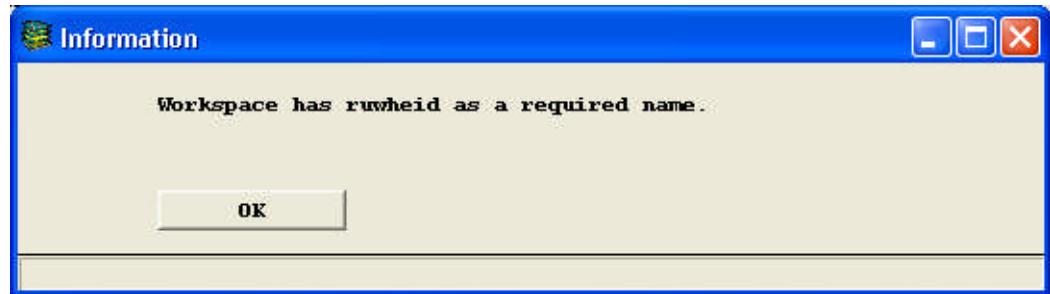
The suggested default name of the coverage to be generated is "ruwheidl". This name is compulsory. If a different name is entered, the following message will be displayed:



If a name contains more than 13 characters, the following message is displayed.



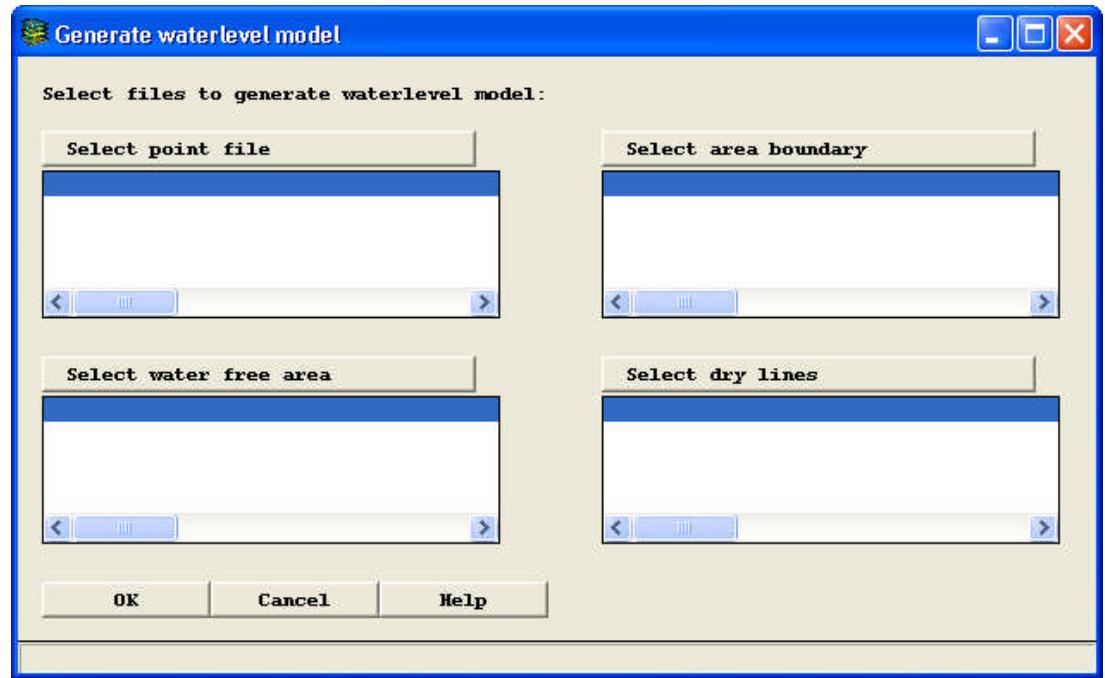
Furthermore, the user must, analogous to the protocol, save the "ruwheidl" coverage in a workspace named "ruwheid". The user can choose a variant different from the one worked in.



During generation of the "ruwheidl" coverage the following features will be written to a log file:  
Name: RUWHEIDL.LOG

1. Top line with date and time
2. Subsequently, type and name of the input file (including path name).
3. Output file (including path name)
4. Final line with date and time

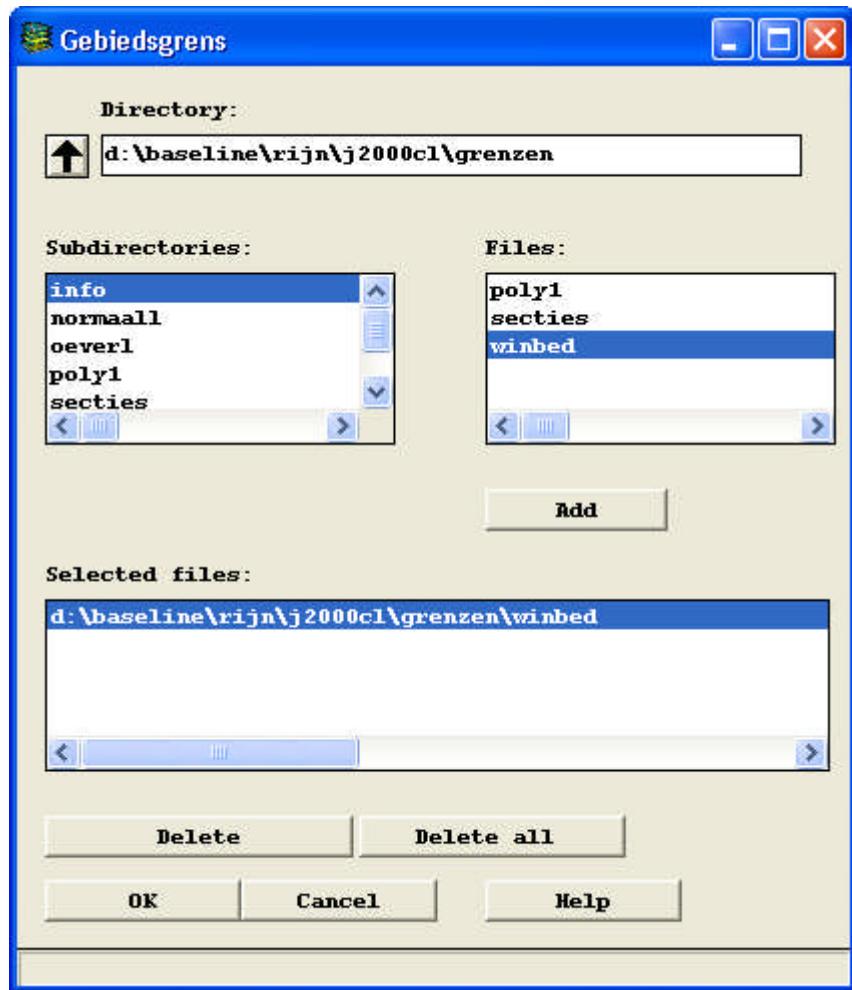
## 11.6 Create water level model



### Generate waterlevel model

Use this window to create a water level model by means of a point file, an area delineation file and (if required) dry area and dry line files.

Select point file:	Click this button to enter the point file selection window. Selection of a point file is compulsory.
Select area boundary:	Use this option to select an elevation model definition file. Selection of the area boundary file is also compulsory.
Select water free area:	If required, use this button to open the water free area selection window.
Select dry lines:	Click this button to open the dry line selection window. This selection is optional and may involve one or more files. Water free areas and dry lines may have been saved in the same file. If a file is selected as water free area and dry line file at the same time, a warning will be displayed at the bottom of the window.
OK:	The water level model (TIN) is created with the selected files, without performing any interpolation across 'dry lines' and within water free areas.
Cancel:	This menu is closed. The water level model is not generated.
Help:	This screen.



### Gebiedsgrens

---

Use these windows to find and select one or more input files.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Files: Files in the current directory. Click one of the files to select it.

Add: Click on this button to add the selected file to the list. If the file cannot be added to the list, this will be reported at the bottom of the menu. Possible reasons may be: only one file to be selected; a missing field in the file.

Selected files: Gives an overview of all files selected so far.

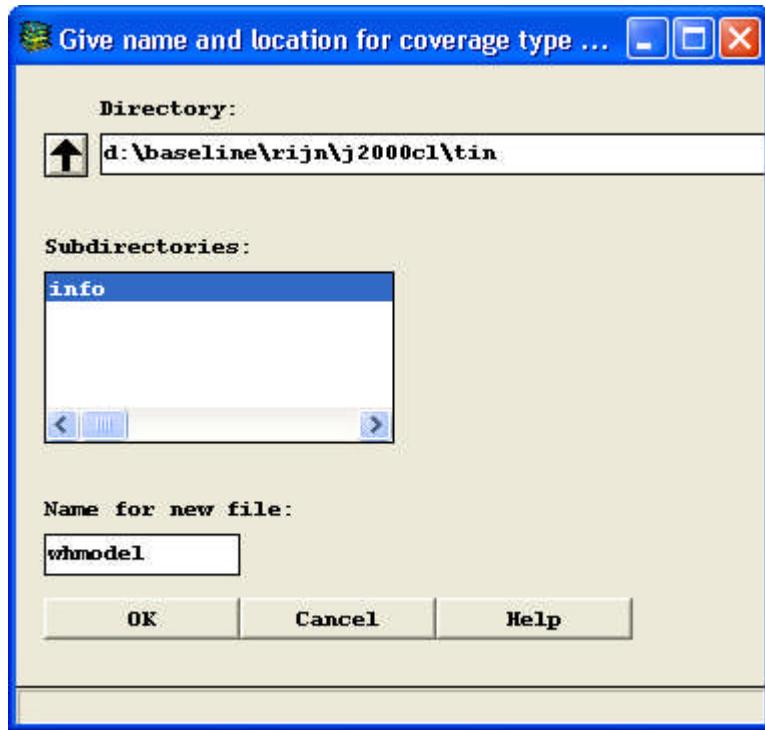
Delete: Use this option to cancel a selection. The file highlighted in the "selected files" overview will be removed from the list.

Delete all: The entire "selected files" overview will be emptied.

OK: The file selection is passed on. You are returned to the previous window.

Cancel: This menu is closed. The original selection is not changed.

Help: This screen.



#### Give name and location for coverage type ...

Use this window to select the directory in which the water level model will be stored including its name.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

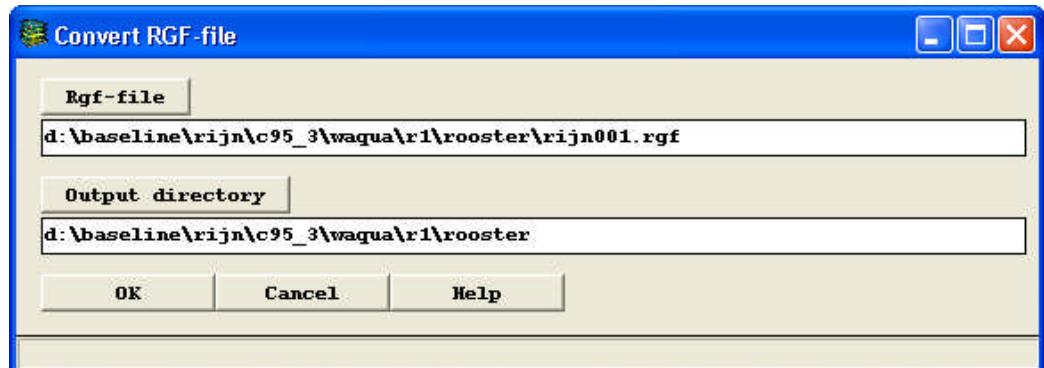
Name for new file: Enter the name of the water level model in this field.

OK: The directory selection is passed on provided that two conditions are met: the directory name is "tin" and you have writing authorisation for this directory. If these conditions are not met, you will be notified. You are returned to the previous window.

Cancel: This menu is closed. The original selection is not changed.

Help: This screen.

## 11.7 Convert Rgf file



### Convert Rgf file

Use this function to convert an Rgf file to a collection of ArcInfo coverages (points, polygons and lines).

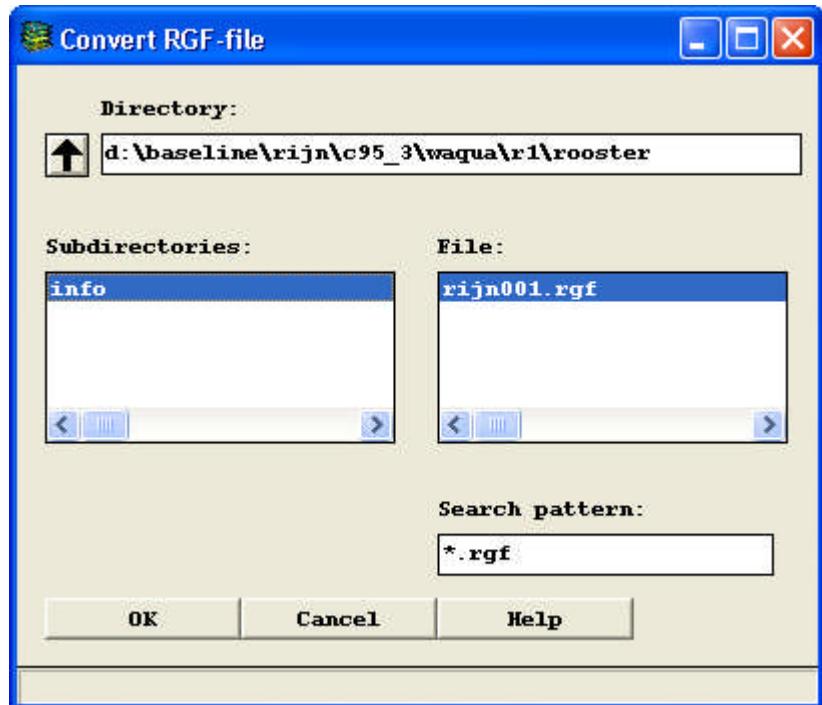
Rgf file: Click this button to enter the Rgf file selection window. This file must be located in the directory with the name: ".../waqua/<grid name>/rooster".

Output directory: The directory in which the coverages will be created. The default directory is the directory containing the Rgf input file.

OK: The WAQUA grid is converted to coverages.

Cancel: This menu is closed. The coverages are not created.

Help: This screen.



## Rgf file

---

Use this window to select the Rgf input file for the creation of ArcInfo coverages.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

File: Files in the current directory. Click one of the files to select it.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: The file selection is passed on. You are returned to the previous window.

Cancel: This menu is closed. The original selection is not changed.

Help: This screen.



## 12 Models

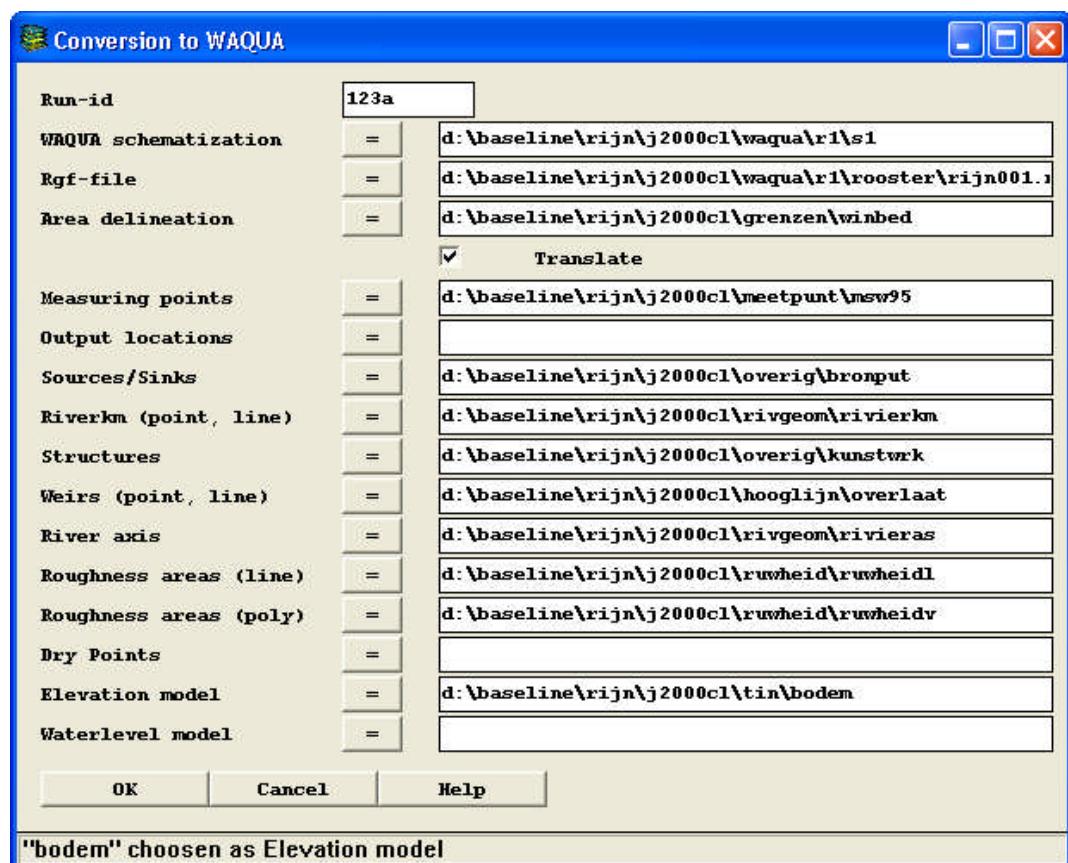
### 12.1 WAQUA conversion

After clicking the option "Conversion to WAQUA", the user can select "Conversion to WAQUA v3.3" or "Conversion to WAQUA v3.0". The Baseline version 3.3 has an improved function for the weir procedure:

- The 20 cm EPS parameter has changed in 1 cm
- Points lying within a range of 0.01 metre are only allocated to a line and not within a range of 5 metres anymore.
- When more points are in the same location, Baswaq can only choose one value. The application software is adjusted and the highest value is always copied now.

However, the user can still choose to use the Baseline v.3.21 method. After the user has made a selection, the following window will be displayed:

#### 12.1.1 Conversion to WAQUA



#### Conversion to WAQUA

The "Conversion to WAQUA" menu enables the creation of WAQUA flow model input files. Various input coverages can be entered. Input coverages are converted into ASCII input files for BASWAQ. BASWAQ is then run and BASWAQ output is saved in the Baseline database. Finally, a number of BASWAQ output files are converted back to coverages.

Run-id: In this field, enter a run-id or command code. In the case of any existing files with the specified run-id, clicking OK will prompt the question whether these files must be overwritten.

WAQUA schematization: Click "=" to select a WAQUA schematization. This selection is compulsory.

Rgf-file: Enables the selection of Rgf files. This selection is also compulsory.

Area delineation: The final compulsory selection delineates the area.

Translate: Click this button to turn area delineation on or off. The "translate" feature calculates the area delineation in BASWAQ.

Entry of the underlying coverages and TIN files is optional.

Only if a weir coverage is selected, the river axis must also be entered.

Measuring points: The point coverage with measuring points located in the /meetpunt/... workspace folder.

Output locations: The point coverage with the x,y coordinates of the WAQUA calculation output locations located in the /waqua/<grid name>/<schematization name>/locaties/... workspace folder.

Sources/Sinks: The point coverage with sluices and other sources and sinks located in the /overig/bronpunt/... workspace folder.

Riverkm (point, line): The point/line coverage with the river kilometres including kilometre points name located in the /rivgeom/... workspace folder.

Structures: The line coverage with structures located in the /overig/kunstwrk/... workspace folder.

Weirs (point, line): The point/line coverages with weirs located in the /hooglijn/... workspace folder.

River axis: The line coverage with the river axis located in the /rivgeom/.... workspace folder.  
Enter this coverage if a weir coverage has been selected.

Roughness areas (line): The RUWHEIDL line coverage with all lines of roughness types located in the /ruwheid/... workspace folder.

Roughness areas (poly): The RUWHEIDL polygon coverage with all polygon roughness types located in the /ruwheid/... workspace folder.

Dry Points: The line coverage with Waqua points located in /waqua/<grid name>/<schematization name>/schotjes/...

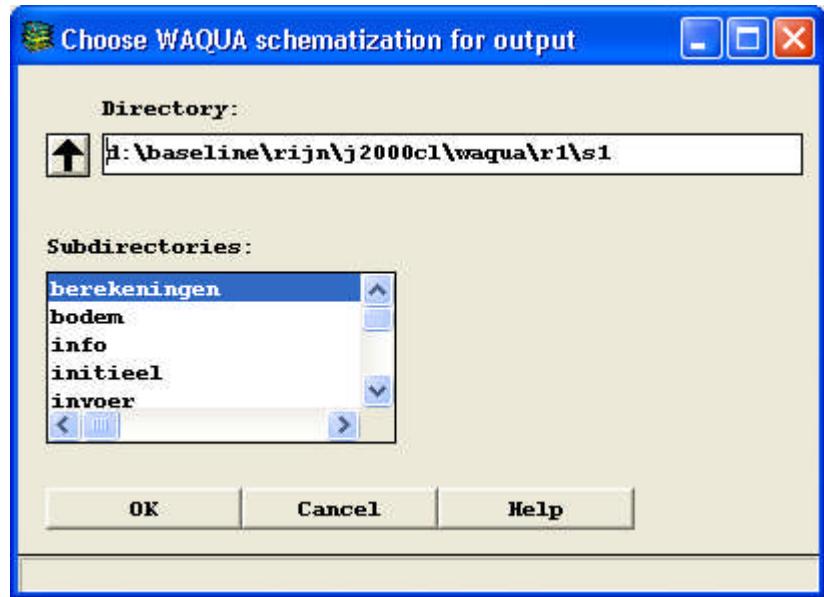
Elevation model: The TIN file with elevation models located in the /tin/... workspace folder.

Waterlevel model: The TIN file with waterlevel models located in the /tin/... workspace folder.

OK: The WAQUA conversion will be carried out after you have been asked whether the files with the selected run-id must be overwritten (if applicable).

Cancel: The menu is closed.

Help: This screen.



#### Choose WAQUA schematization for output

Use this window to select a WAQUA schematization. The directory has to be located in a WAQUA grid directory.

Directory: This input field shows the current path.

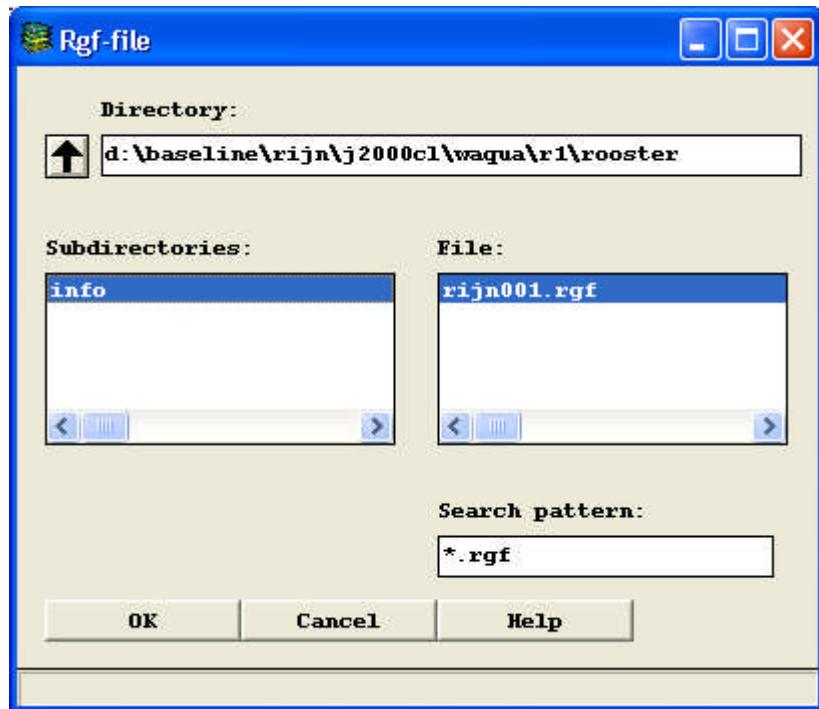
'Arrow Up': Move up one directory.

Subdirectories: Select a (sub)directory with the WAQUA schematization. This will change the current directory name.

OK: The schematization directory is selected.

Cancel: The menu is closed.

Help: This screen.



### Rgf-file

---

Use this window to select the Rgf input file for BASWAQ.

Directory: The Rgf file search directory.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

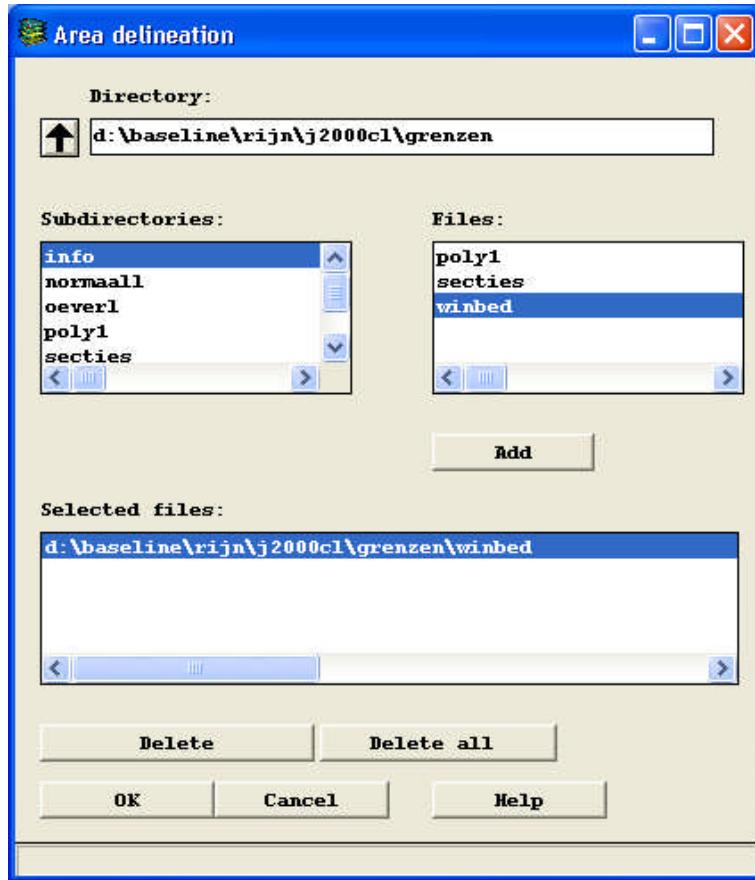
File: Rgf files in the current directory. Click one of the files to select an Rgf file.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: The file selection is confirmed.

Cancel: This menu is closed. The original selection is not changed.

Help: This screen.



## Area delineation

---

Select a BASWAQ input file.

Directory: This input field shows the current path.

'Arrow Up': Move up one directory.

Subdirectories: Summary of available subdirectories in the current directory.

Files: Summary of available files in the selected subdirectory.

Add: Adds selected file to the list of selected files.

Selected files: List of selected files.

Delete: The selected file is removed from the list.

Delete all: All files are removed from the list.

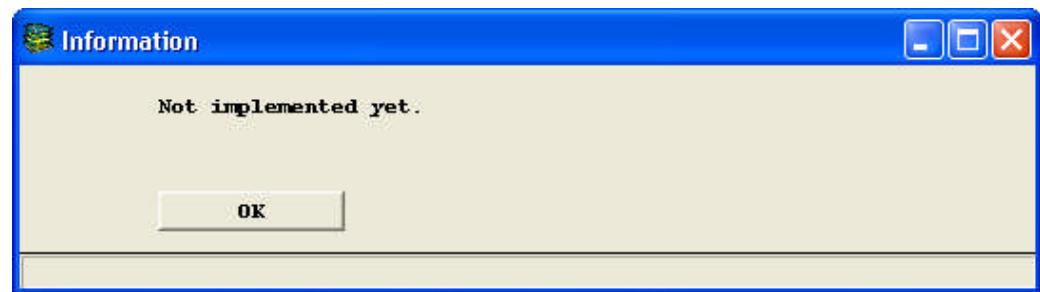
OK: The selected file is used as BASWAQ input.

Cancel: Return to previous window. The selection is cancelled.

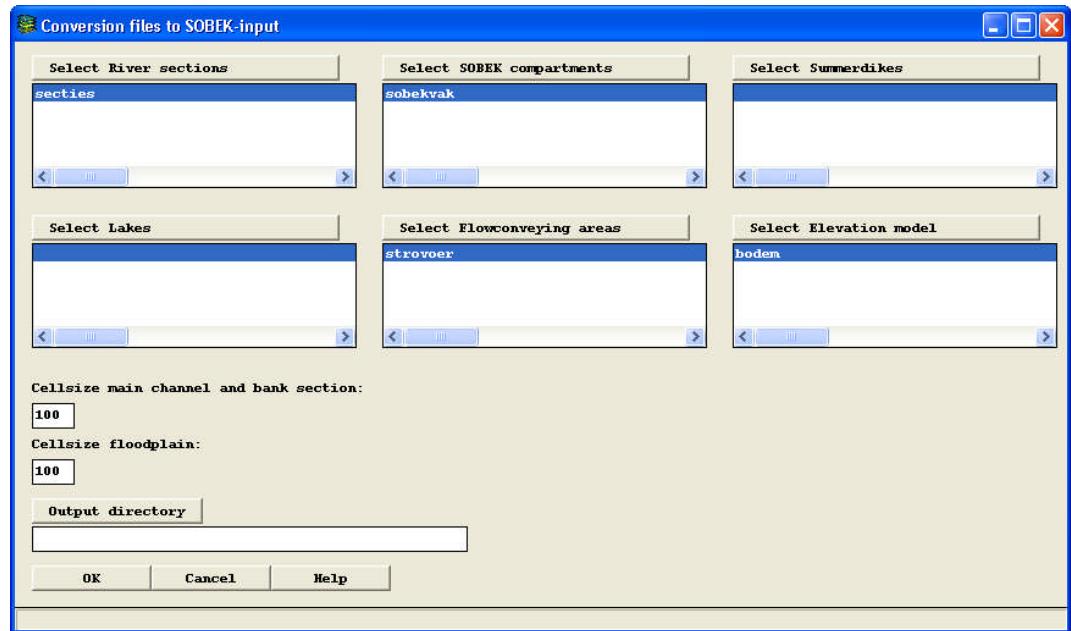
Help: This screen.

The window functions of the other input files are identical and the same help file is opened. The files can be both coverages and tins.

### 12.1.2 WAQUA conversion



## 12.2 SOBEK conversion



### Conversion files to SOBEK input

Use the "Conversion files to SOBEK input" window to create SOBEK input files by gridding basic files. The grids are saved in the input/grid workspace in a schematization folder.

Select River sections: Select a section file in the list.

Select SOBEK compartments:  
Select a SOBEK compartment file in the list.

Select Summer dikes: Select a SOBEK summer dike file in the list.

Select Lakes: Select a lake file in the list.

Select Flow conveyance areas:  
Select a flow area file in the list.

Select Elevation model: Select an elevation file TIN in the list.

Cell size main channel and bank section:  
Required cell size for main channel and bank sections.

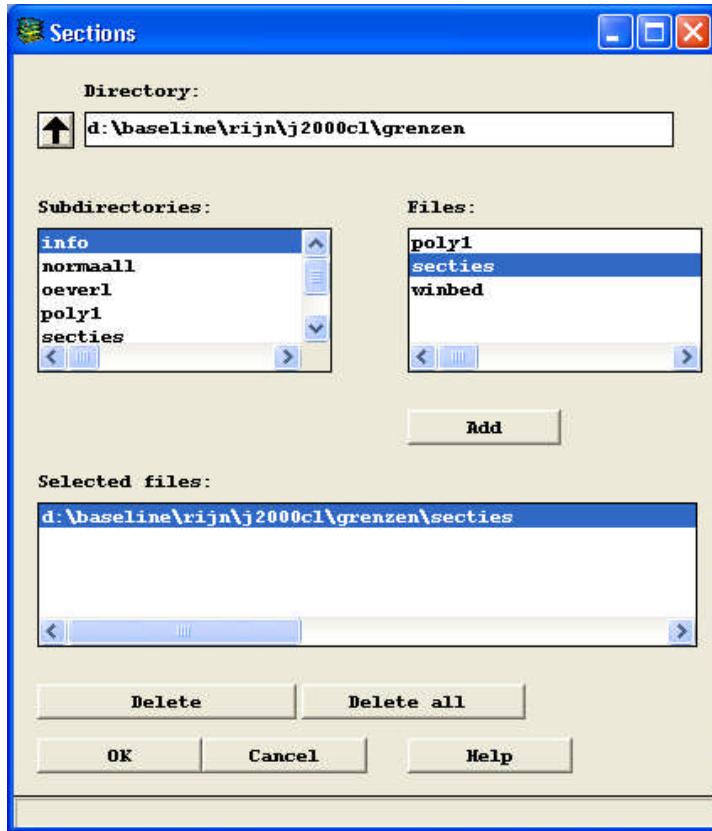
Cell size floodplain: Required cell size for floodplains.

Output directory: Opens a window in which to set the output directory. The grids to be created have fixed names and are placed in the workspace folder:  
.../<schematization>/invoer/grid

OK: Starts the creation of the grids.

Cancel: The menu is closed.

Help: This screen.



## Sections

---

Select an input file for the creation of SOBEK input grids.

Directory: This input field shows the current path.

'Arrow Up': Move up one directory.

Subdirectories: Summary of available subdirectories in the current directory.

Files: Summary of available files in the selected subdirectory.

Add: Adds selected file to the list of selected files.

Selected files: List of selected input files.

Delete: The selected file is removed from the list.

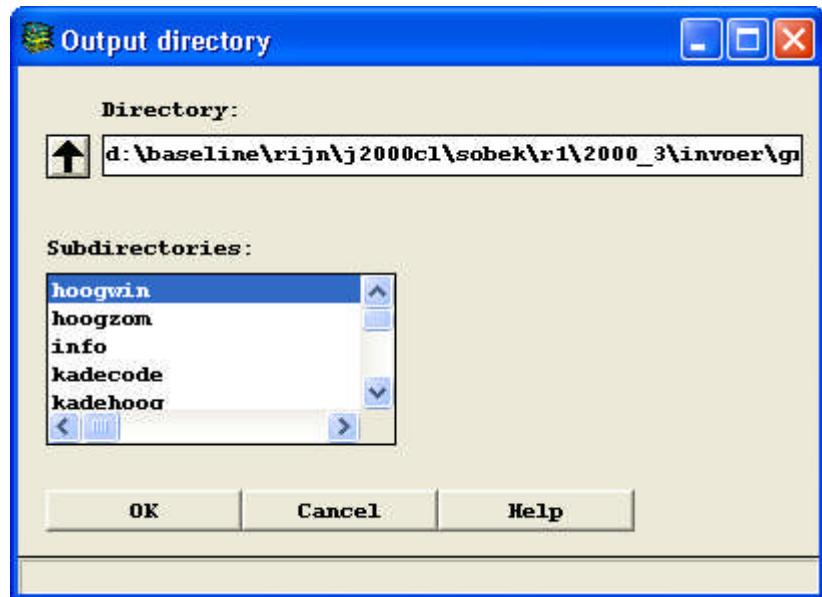
Delete all: All files are removed from the list.

OK: The selected files are used for the creation of SOBEK input grids.

Cancel: Return to previous window. The selection is cancelled.

Help: This screen.

The window functions of the other input files are identical en the same help file is opened. The files can be both coverages and tins.



### Output directory

Use this window to select the output directory for the SOBEK input grids. The directory must have the name "invoer/grid" and must be located in a SOBEK schematization.

Directory: This input field shows the current path.

'Arrow Up': Move up one directory.

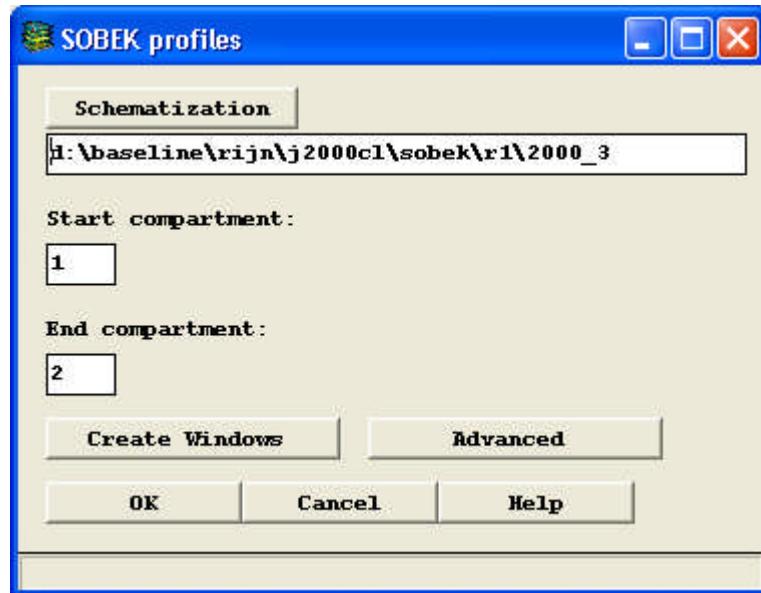
Subdirectories: Select the directory in which the SOBEK input grids have to be created.

OK: The output directory is selected.

Cancel: The menu is closed.

Help: This screen.

## 12.3 SOBEK profiles



### SOBEK profiles

Use the "SOBEK profiles" window to create SOBEK profiles or to create an ASCII window file. These are compartments which move over the area during SOBEK calculations, thus speeding up the calculation process.

Schematization: Select a SOBEK schematization in the list.

Start number/  
End number: Enter the start and end numbers of the compartments for which calculations have to be carried out.

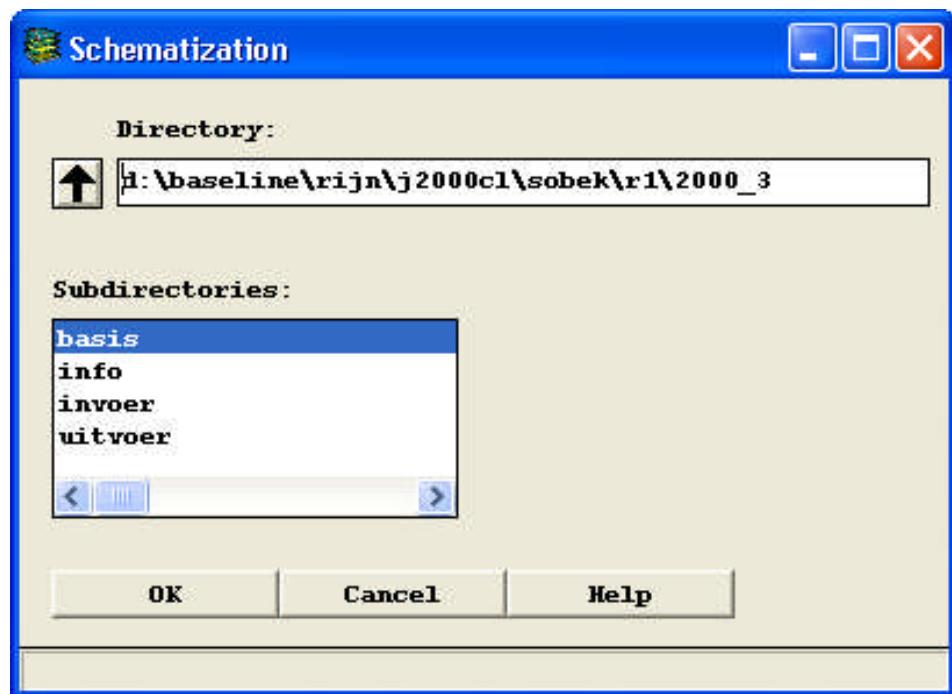
Create Windows: This creates an ASCII window file. The file is called "windows.txt" and is located in the workspace folder : ..../< schematization >/basis. This feature has become redundant.

Advanced: Enter advanced options (other than defaults) in the next window. It is possible to enter calculation options for profiles with deviating calculation rules.

OK: Starts the creation of the profiles.

Cancel: The menu is closed.

Help: This screen.



### Schematization

---

Use this window to select a schematization. The created SOBEK profiles are located in this schematization.

Directory: This input field shows the current path.

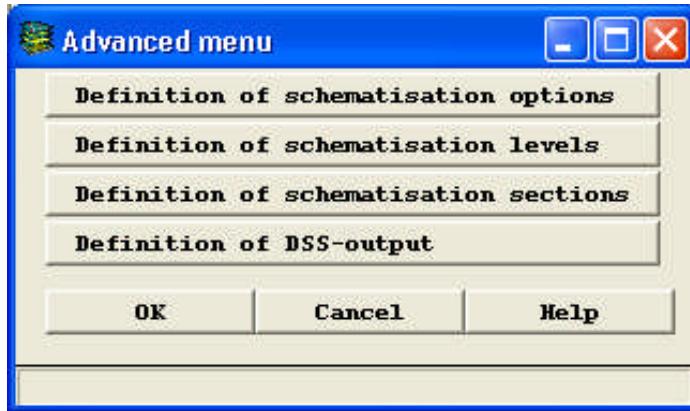
'Arrow Up': Move up one directory.

Subdirectories: Select a directory with a schematization.

OK: The schematization directory is selected.

Cancel: The menu is closed.

Help: This screen.



### Advanced menu

This window allows for the selection of a number of advanced options in order to calculate SOBEK profiles which have a format different from the default SOBEK profiles. Default SOBEK profiles consist of 15 levels and the schematization algorithm for the calculation of their geometry is tested for the Dutch Rhine branches, the Meuse river and part of the German Rhine. If there are profound arguments to deviate from these default profiles due to different hydraulic conditions, these advanced options can be used to adapt SOBEK profiles to these conditions.

Definition of schematization options:

This opens a window in which specific calculation options can be entered.

Definition of schematization levels:

This opens a window in which different levels can be entered for each section.

Definition of schematization sections:

This opens a window in which the (re)calculation of the partial or the entire SOBEK profile can be entered.

Definition of DSS-output:

This opens a window in which SOBEK profiles in ASCII format can be converted to profiles in User Interface format. Cross-sections in DSS files can also be converted.

OK:

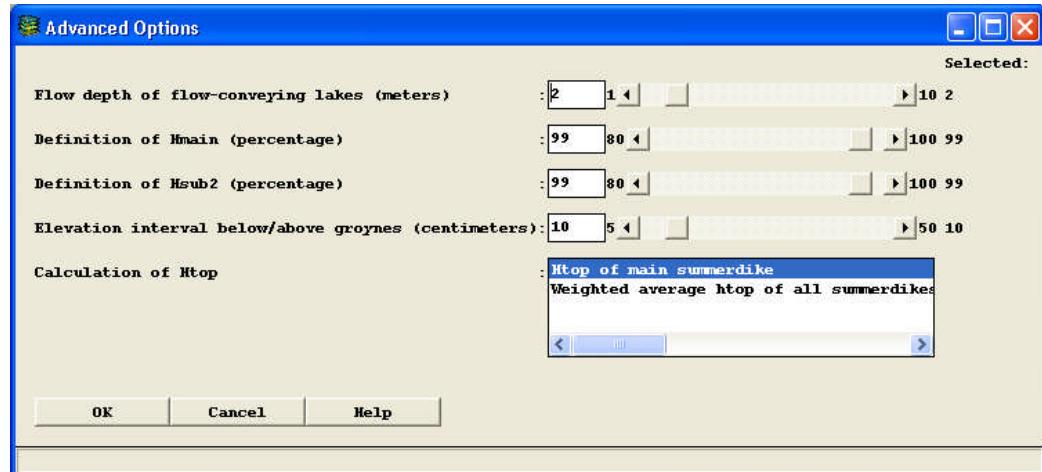
This menu is closed. The options are saved.

Cancel:

This menu is closed. The options are discarded.

Help:

This screen.



### Advanced Options

This window allows for the selection of advanced options in order to calculate SOBEK profiles which have a format different from the default SOBEK profiles.

Flow depth of flow-conveying lakes (meters) :

Enter the extra depth which is added to the flow conveying cross-sectional area ( $dA_f$ ) of a SOBEK profile when a lake starts participating in flow conveyance.

Definition of Hmain (percentage):

This value defines the lowest level in the main channel and is defined as a percentage exceedance level (xx % of the area in the main channel is higher than this lowest level).

Definition of Hsub2 (percentage):

This value defines the highest level in the main channel and is defined as a percentage exceedance level (xx % of the area in the main channel is lower than this highest level).

Elevation interval below/above groynes (centimetres):

This value defines the elevation interval between the groyne level ( $H_{krib}$ ) and the levels below ( $H_{krib-1}$ ) and above ( $H_{krib+1}$ ).

Calculation of Htop:

This option defines the manner in which the summer dike level ( $H_{top}$ ) is calculated. The default is the  $H_{top}$  of main summer dike. The alternative is the weighted average  $H_{top}$  of all summer dikes.

OK:

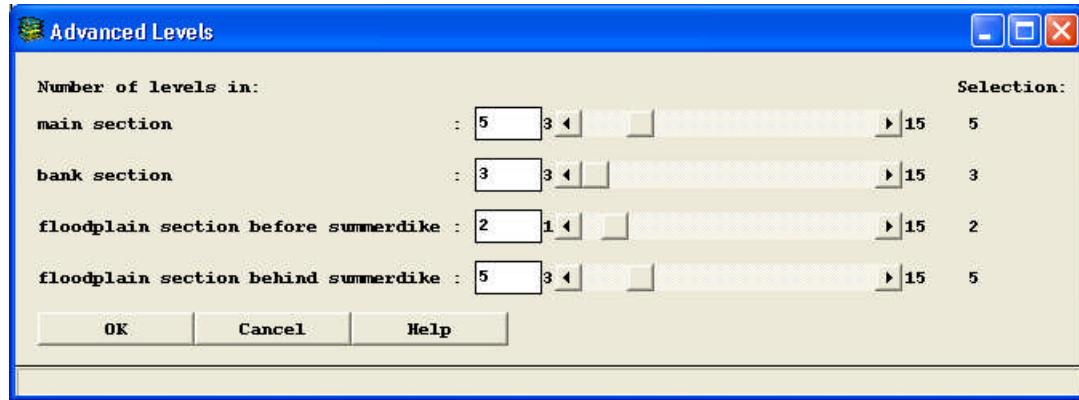
This menu is closed. The options are saved.

Cancel:

This menu is closed. The options are discarded.

Help:

This screen.



### Advanced Levels

---

This window allows for the selection of advanced options in order to calculate SOBEK profiles which have a number of levels different from the default SOBEK profiles.

Number of levels in:

main section: Default 5, Range 3-15.

bank section: Default 3, Range 3-15.

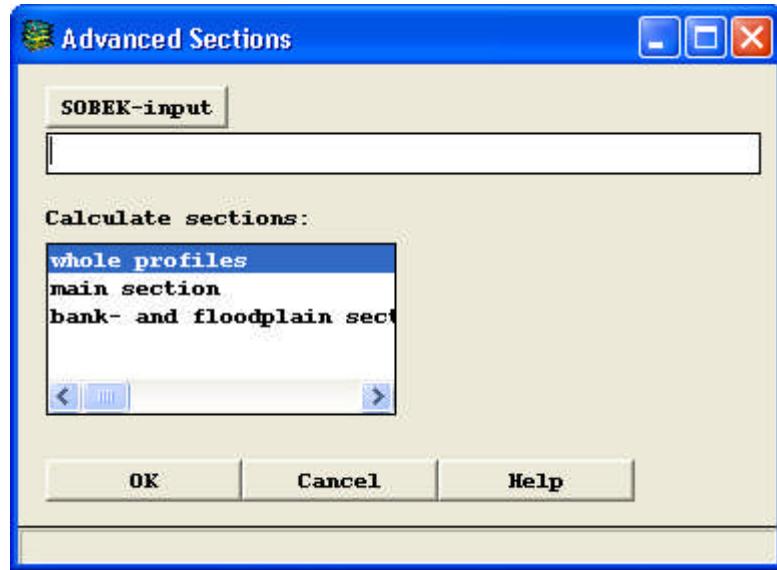
floodplain before summerdike: Default 2, Range 1-15.

floodplain behind summerdike: Default 5, Range 3-15.

OK: This menu is closed. The options are saved.

Cancel: This menu is closed. The options are discarded.

Help: This screen.



### Advanced sections

---

This window allows for the selection of a number of advanced options in order to replace parts of existing SOBEK profiles.

basis: This opens a dialog box in which an existing schematization can be chosen. Fill this field when part of the profile has to be recalculated.

#### Calculate sections:

whole profiles: the entire profile is calculated.

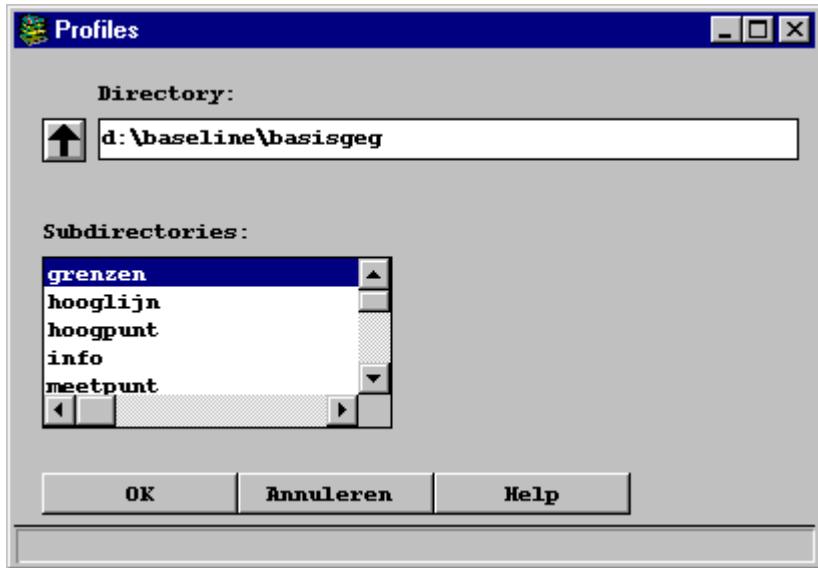
main section: The main channel is (re)calculated, other parts are copied from existing profiles.

bank and floodplain sections: Bank and floodplain sections are (re)calculated, other parts are copied from existing profiles.

OK: This menu is closed. The options are saved.

Cancel: This menu is closed. The options are discarded.

Help: This screen.



## Profiles

---

Use this function to select a SOBEK schematization.

Directory: This input field shows the current path.

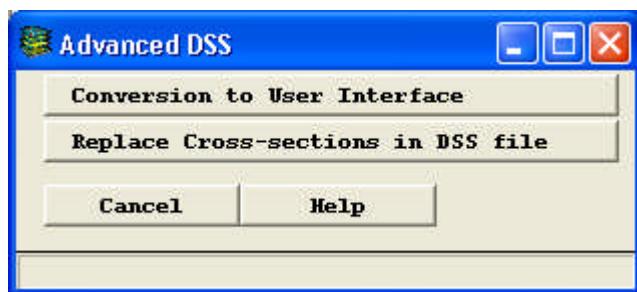
'Arrow Up': Move up one directory.

Subdirectories: Select a directory with a schematization.

OK: The schematization directory is selected.

Cancel: The menu is closed.

Help: This screen.



## Advanced DSS

---

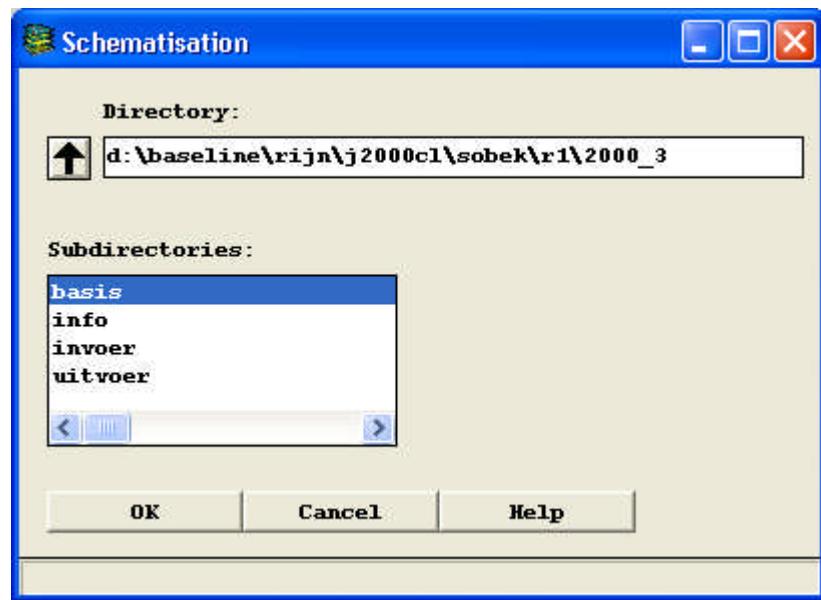
This window offers two options to process previously calculated cross sections.

Conversion to User Interface: Opens a dialog box in which a schematization directory can be chosen.

Replace cross sections in DSS file: Opens a dialog box in which a schematization directory can be chosen.

Cancel: This menu is closed. The options are discarded.

Help: This screen.



#### Schematisation

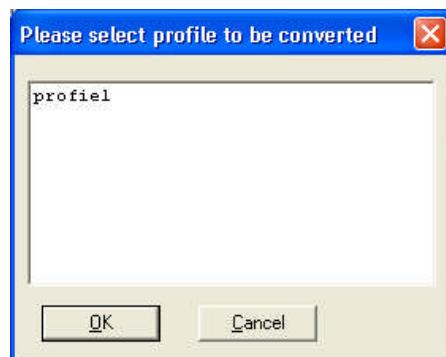
Use this window to select a SOBEK schematization. The existing SOBEK profiles can be found in this schematization. Confirming the selected directory as schematization will open a window with a list of profile files. Select a file. The resulting file (after conversion) can be found in the schematization.

Directory: This input field shows the current path.

'Arrow Up': Move up one directory.

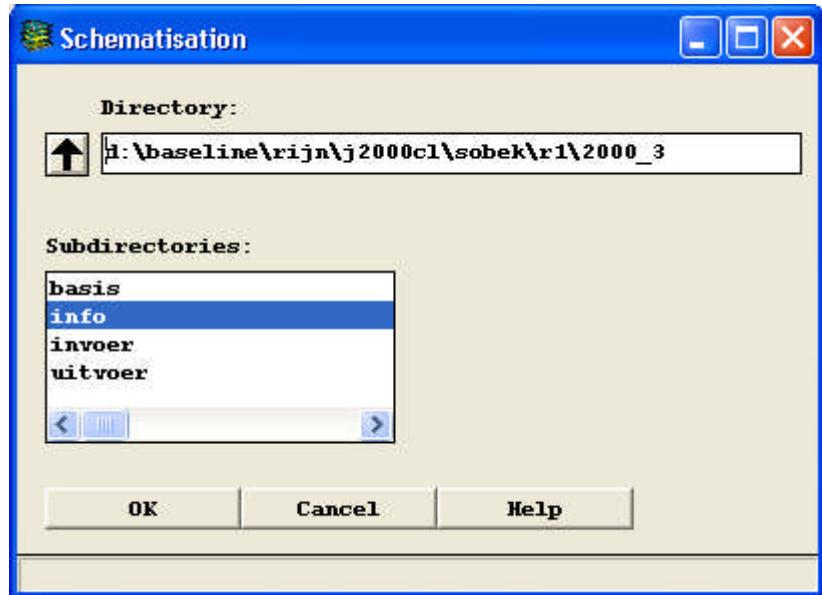
Subdirectories: Select a directory with a schematization.

OK: The schematization directory is selected.



Cancel: The menu is closed.

Help: This screen.



### Schematisation

---

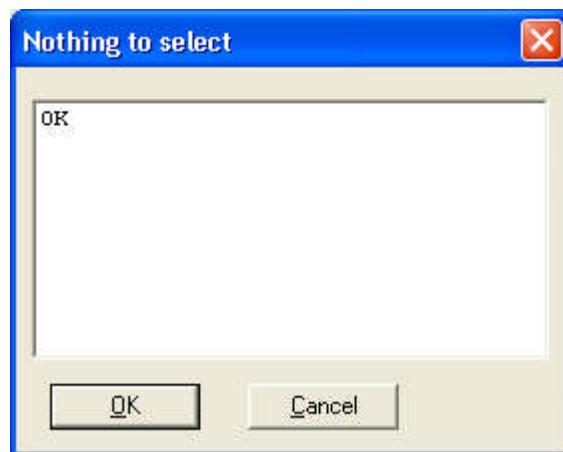
Use this window to select a SOBEK schematization. The existing SOBEK profiles (cross sections) can be found in this schematization. Confirming the selected directory as schematization will open a window with a list of DSS input files. Select a file. Another window will appear with a list of cross section file(s). Select a file. The resulting file, after replacement of cross section block, will be located in the schematization.

Directory: This input field shows the current path.

'Arrow Up': Move up one directory.

Subdirectories: Select a directory with a schematization.

OK: The schematization directory is selected.



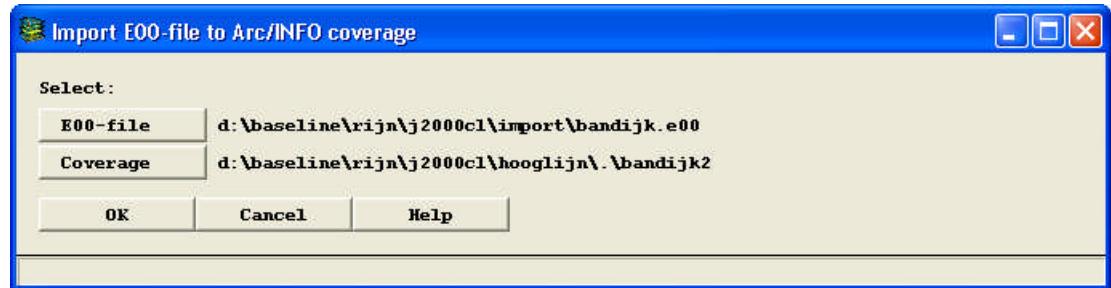
Cancel: The menu is closed.

Help: This screen.

## 13 Import/Export

### 13.1 ArcInfo

#### 13.1.1 Import



#### Import E00-file to Arc/Info coverage

Select:

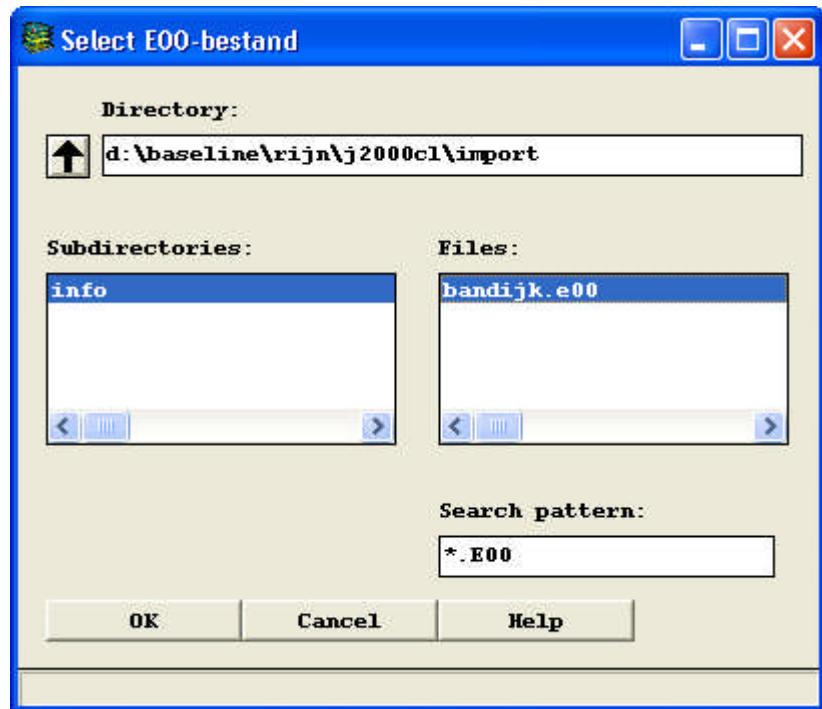
E00 file: Click this button to open a window in which the file to be imported can be selected. The file must be located in the IMPORT workspace and have the extension .e00.

Coverage: Click this button to open a new window in which a name and location for the coverage to be created can be entered.

OK: Accept the selected files. The import is started.

Cancel: Close the menu and cancel the import.

Help: This screen.



### Select E00-bestand

---

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

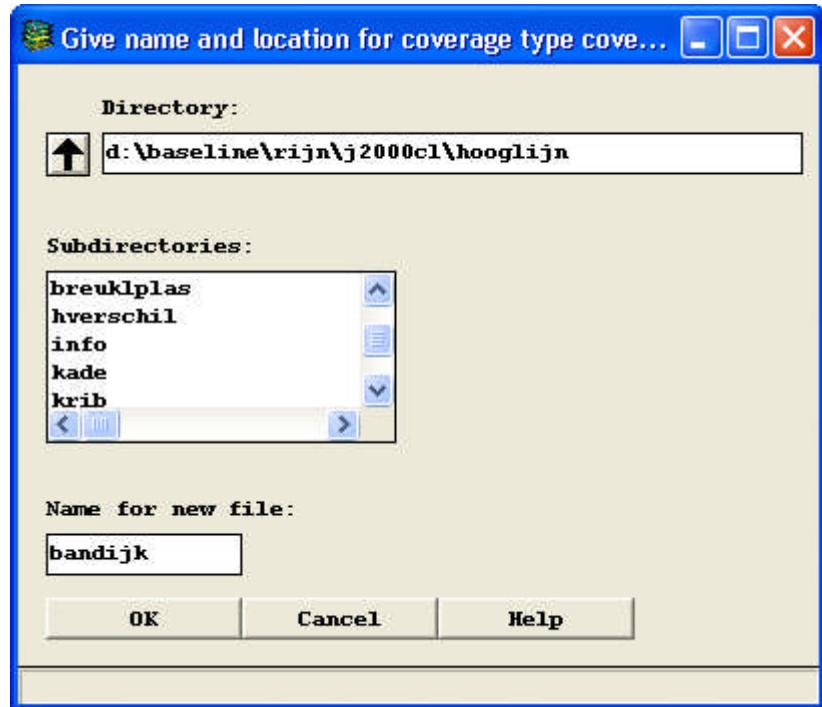
Files: Available files in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



#### Give name and location for new coverage type cove...

---

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

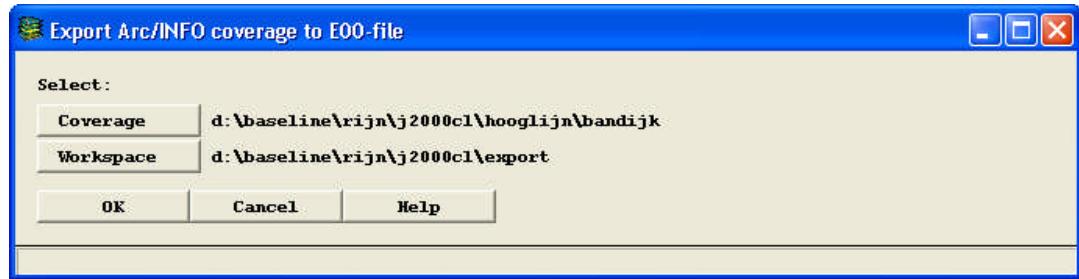
Name for new file: Enter a new name for the coverage to be created.

OK: The coverage name is saved and you are returned to the previous window.

Cancel: The menu is closed. The coverage name is not saved.

Help: This screen.

### 13.1.2 Export



#### Export Arc/Info coverage to E00-file

---

Select:

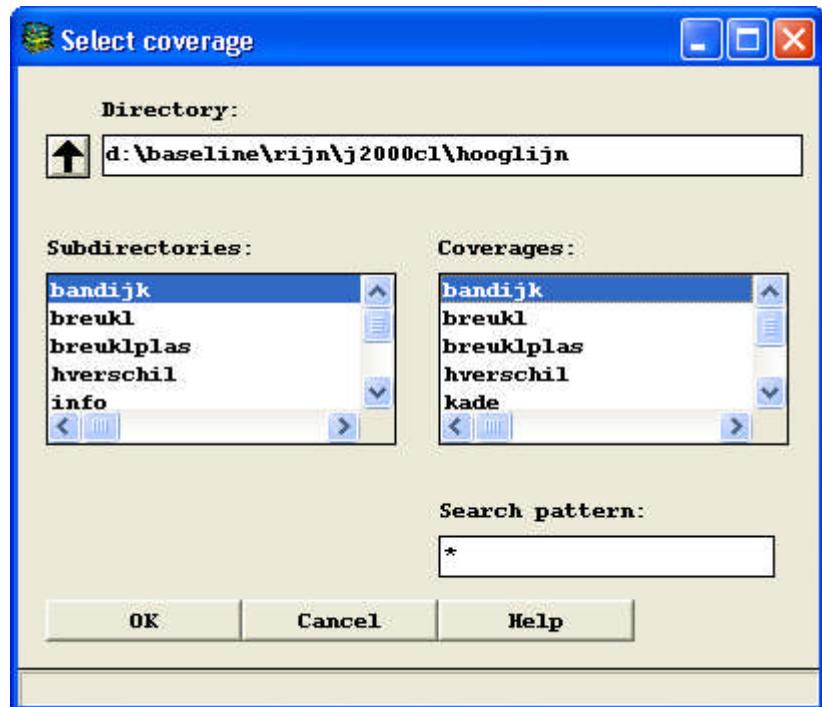
Coverage: Click this button to open a window in which a coverage can be selected.

Workspace: Click this button to open a window in which a workspace can be selected. The export files are located in this workspace, which must be named EXPORT.

OK: Accept the selected coverage and workspace. The export is started. The name of the export file is equal to the name of the coverage with the extension '.e00'.

Cancel: Close the menu and cancel the export.

Help: This screen.



### Select coverage

---

Use this window to select a coverage for the previous page.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

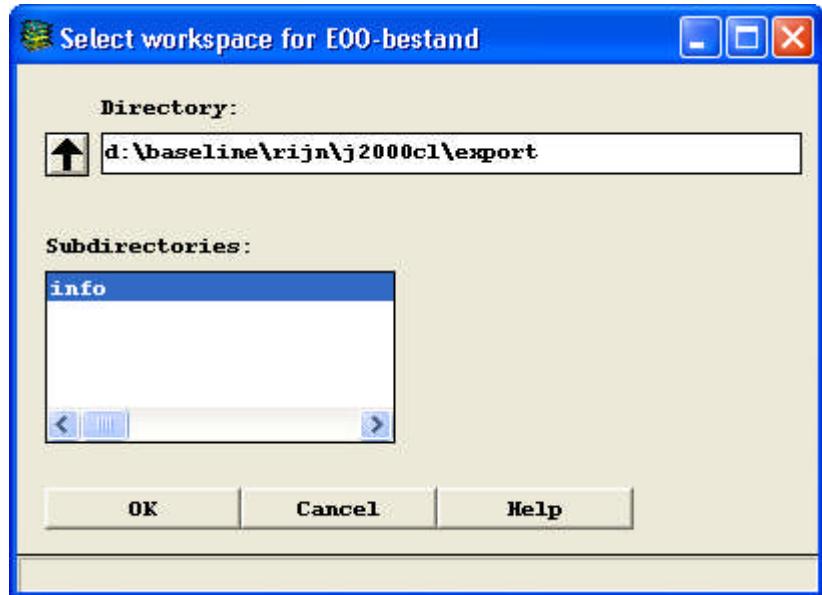
Coverages: Available coverages in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



### Select workspace for E00-bestand

---

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing the subdirectory will define the workspace in which the file is to be created.

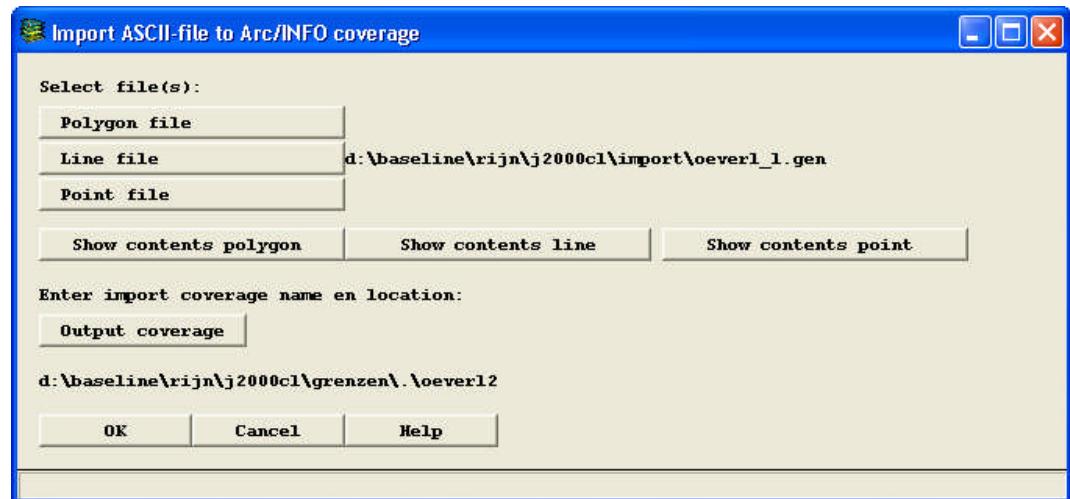
OK: Accept the selected workspace as the workspace in which the new file will be located. The workspace name sometimes has to meet specific requirements. A workspace with an incorrect name will not be accepted by Baseline.

Cancel: Close the menu.

Help: This screen.

## 13.2 ASCII

### 13.2.1 Importing



#### Import ASCII-file to Arc/INFO coverage

Use this window to generate polygon, line and point coverages from ASCII files. The files to be imported must be located in the workspace with the name IMPORT.

The (compulsory) names for the files are:

polygon file: <name>\_v.gen  
line file: <name>\_l.gen  
point file: <name>\_p.gen

It is not possible to select both a polygon and a point file.

Select file(s):

Polygon file: - structure: ID  
x1 y1  
x2 y2  
.. ..  
xn yn  
END  
..  
ID  
x1 y1  
x2 y2  
.. ..  
xn yn  
END  
END

Line file: - structure: see polygon file

Point file: - structure: ID x1 y1  
ID x2 y2  
.. .. ..  
END

Each file may be attended by attribute information for the feature in question. These files will be read automatically upon selection of one of the above-mentioned files. The structure of these attribute information files is as follows:

The first line contains a header with the attribute definition.

The structure of the header is as follows:

- attribute name
- attribute width
- attribute image width
- attribute type
- number of decimals: must always be entered; in the absence of decimals (e.g. characters) the value 0 must be entered!

Line two and further contain the attribute values separated by commas; one line for each element.

Example:

```
KADE-ID,4,5,B,0, K_HOOGTE,4,12,F,2,R_HOOGTE,4,12,F,2,L_HOOGTE,4,12,F,2
5,14.57,12.35,12.30
6,12.87,10.56,10.70
```

Show contents polygon: Click this button to open a popup window with the contents of the table <name>\_v.asc possibly accompanying the file <name>\_v.gen

Show contents line: Click this button to open a popup window with the contents of the table <name>\_l.asc possibly accompanying the file <name>\_l.gen

Show contents points: Click this button to open a popup window with the contents of the table <name>\_p.asc possibly accompanying the file <name>\_p.gen

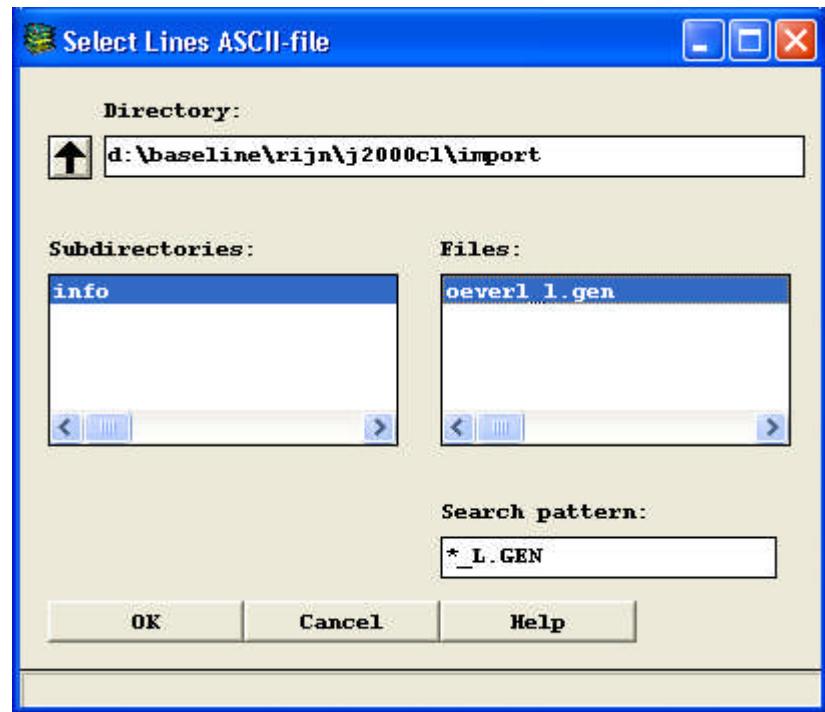
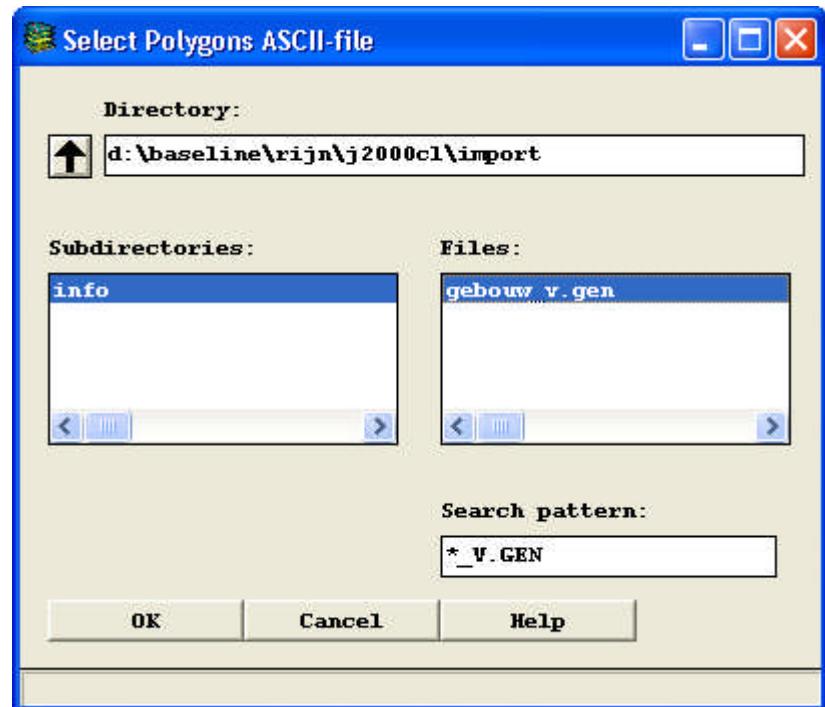
Enter import coverage name and location:

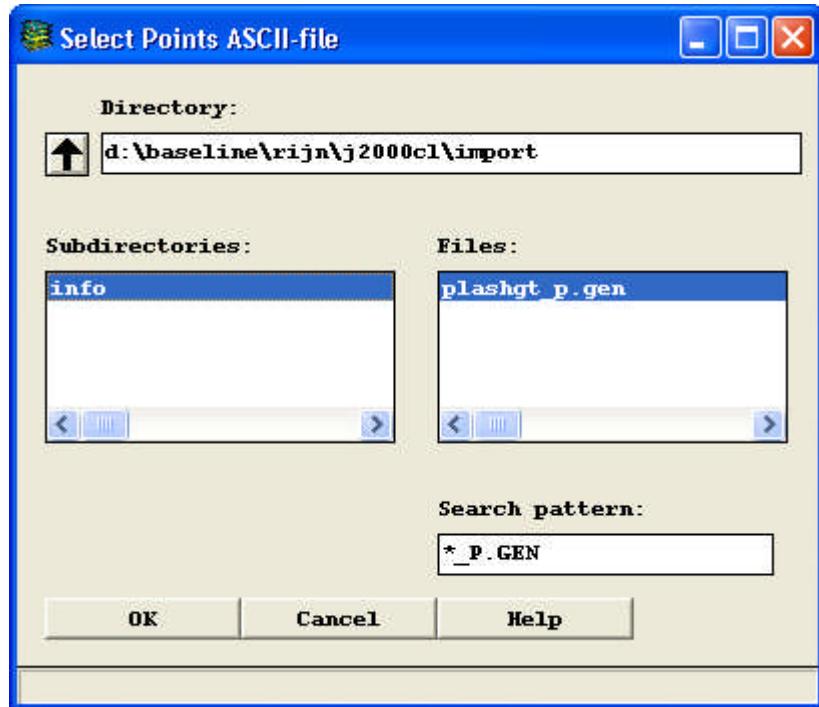
Output coverage: Click this button to open a new window in which a name and location for the coverage to be created can be entered.

OK: Accept the selected files. The import is started.

Cancel: Close the menu and cancel the import.

Help: This screen.





#### Select polygon, line or point file (ASCII file)

---

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

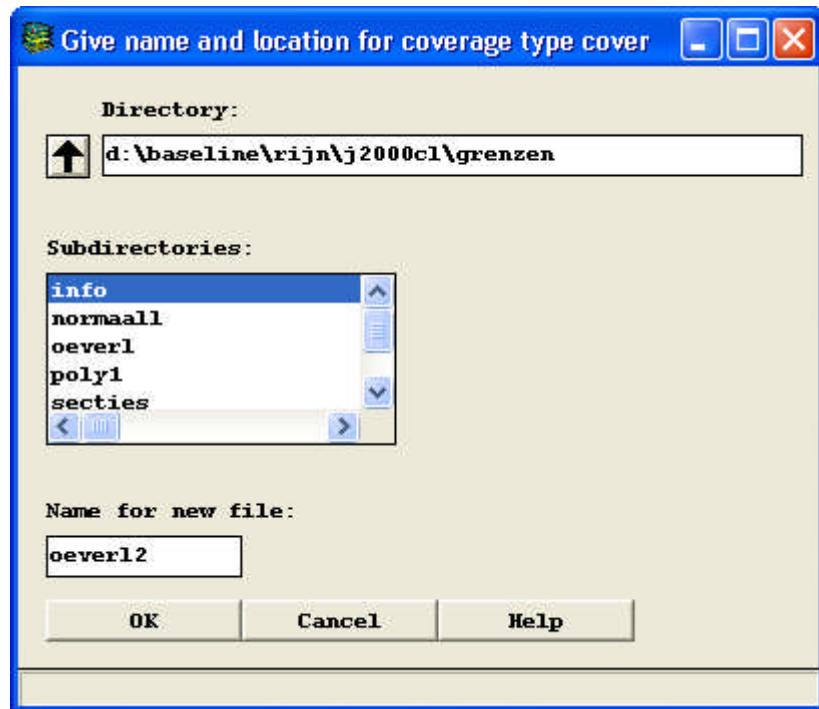
Files: Available files in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



### Give name and location for coverage type cover

---

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Name for new file: Enter a new name for the coverage to be created.

OK: The coverage name is saved and you are returned to the previous window.

Cancel: The menu is closed. The coverage name is not saved.

Help: This screen.

### 13.2.2 Exporting



#### Export Arc/INFO coverage to ASCII-files

Click on the corresponding button to select the name of the coverage to be exported and the destination name (workspace).

Select:

Coverage:

Click this button to open a window in which a coverage can be selected.

Workspace:

Click this button to open a window in which a workspace can be selected. The ASCII files will be located in this workspace. The workspace must be named EXPORT.

OK:

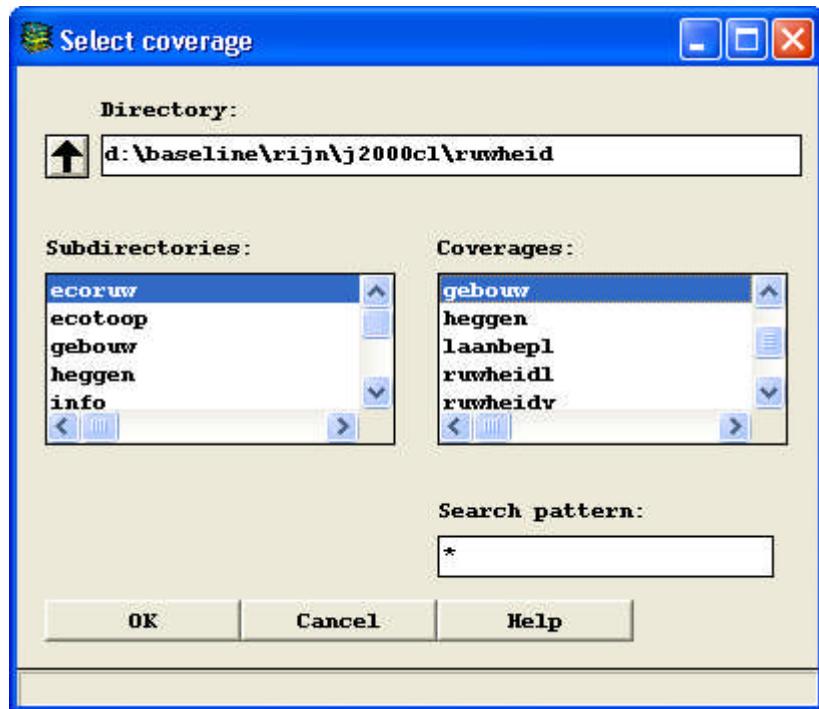
Accept the coverage and workspace selected and start exporting. A file with the extension '.gen' is created per feature type. If the coverage table contains additional attributes, they will be written to an ASCII file with the extension '.asc'. The file name itself is equal to the name of the coverage, with the suffixes \_p, \_l or \_v, respectively, indicating whether they contain points, lines or polygons.

Cancel:

Close the menu and cancel the export.

Help:

This screen.



### Select coverage

---

Use this window to select a coverage for the previous page.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

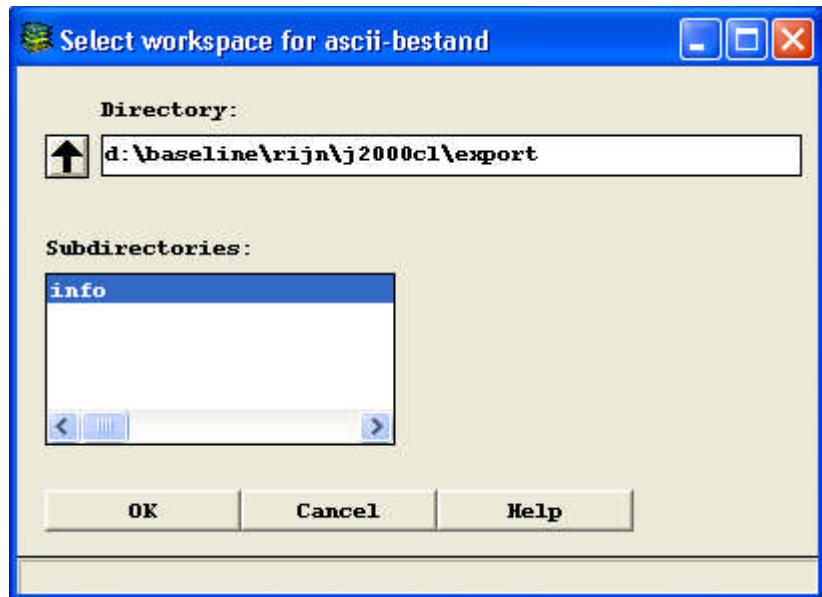
Coverages: Available coverages in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



#### Select workspace for ascii file

---

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing the subdirectory will define the workspace in which the file is to be created.

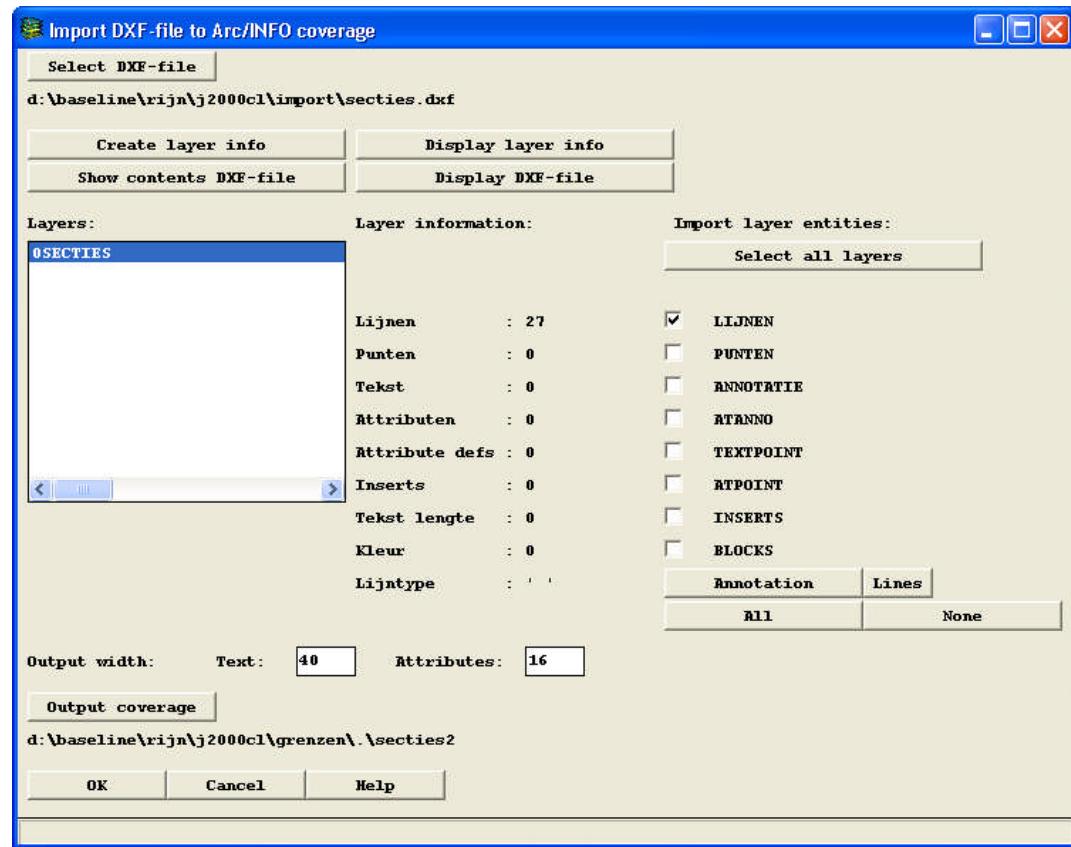
OK: Accept the selected workspace as the workspace in which the new file will be located. The workspace name sometimes has to meet specific requirements. A workspace with an incorrect name will not be accepted by Baseline.

Cancel: Close the menu.

Help: This screen.

## 13.3 DXF

### 13.3.1 Importing



#### Import DXF-file to Arc/INFO coverage

Use this function to import DXF files to an ArcInfo coverage.

Select DXF file:

Select a DXF file for conversion. The files to be imported must be located in the directory with the name IMPORT!

Create layer info:

Click this button to be able to display layer information on the DXF file selected. This procedure may take some time.

Display layer info:

Opens a window with information on all layers present in the DXF file.

ARC									
LAYER NAME	ARCS	POINTS	TEXT	ATTRIB	ATTDEF	INSERT	LEN	COLOR	LINETYPE
OSECTIES	27	0	0	0	0	0	0	0	0
ALL LAYERS	27	0	0	0	0	0	0	0	0

Show contents DXF file:

Opens a window with the contents of the DXF file.

Display DXF file:

A graphical display of the DXF file prior to conversion.

The Layers window displays all layers present in the DXF file. Selecting a layer will open a list with information on this layer. Next, indicate the entities to be converted to a coverage per layer. The following options are possible:

**Import layer entities:**

Select all layers: All entities of all layers are converted.

Lijnen:

Lines are converted.

Punten:

Points are converted.

Annotatie:

Annotations are converted.

Atanno:

Attributes are converted to annotation.

Textpoint:

Text is converted to points.

Atpoint:

Annotation is converted to points.

Inserts:

Inserts are converted to points.

Blocks:

Blocks are exploded.

Annotatie:

Annotation is converted.

Lijnen:

All lines are converted.

All:

All entities are converted.

None:

No entity from the selected layer is converted.

**Output coverage:**

Select the name of the coverage to which the DXF file is to be converted.

OK:

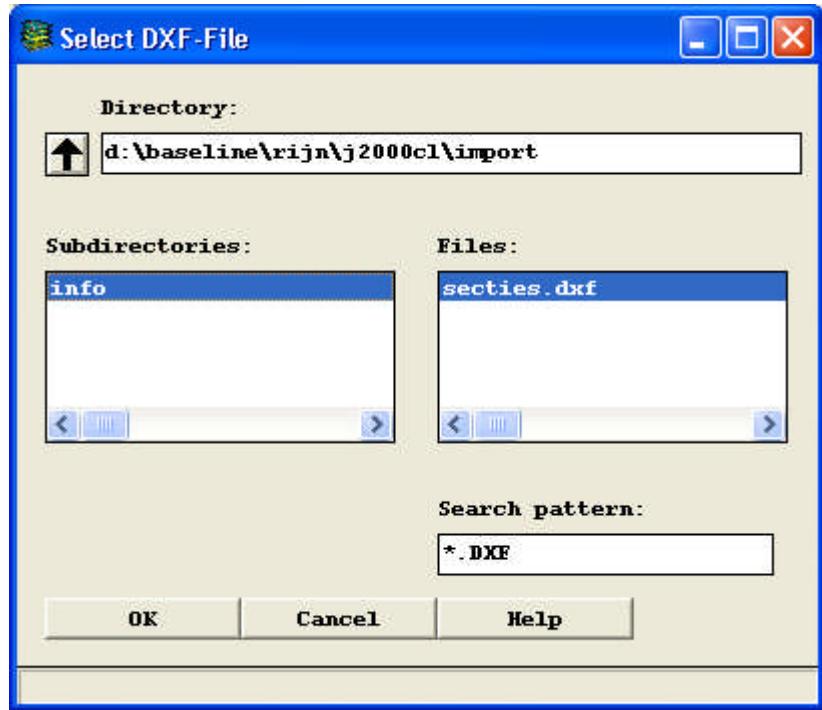
Perform DXF conversion.

Cancel:

Do not perform DXF conversion and close the menu.

Help:

This screen.



## Select DXF-File

---

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

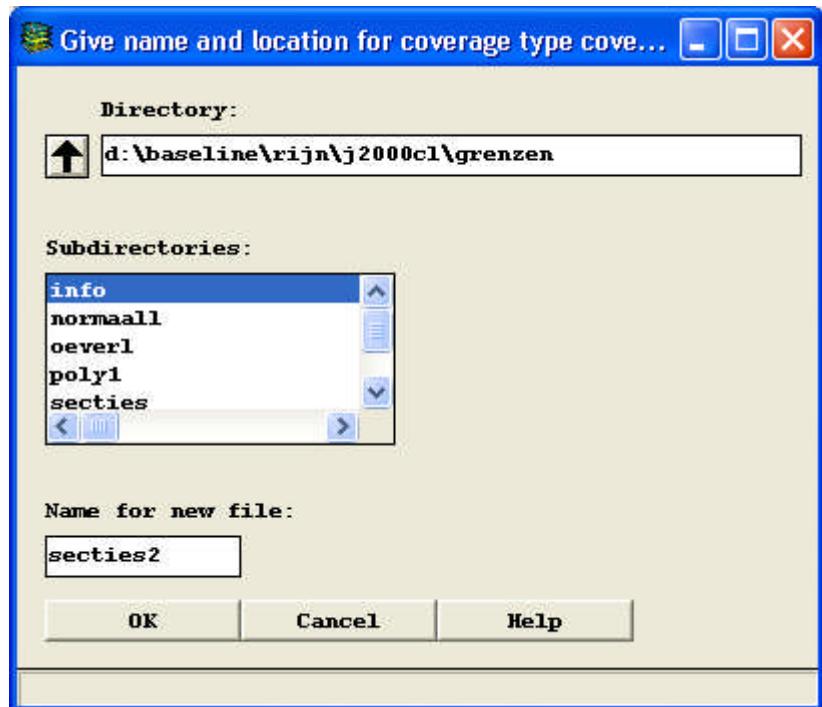
Files: Available files in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



#### Give name and location for coverage type cove...

---

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

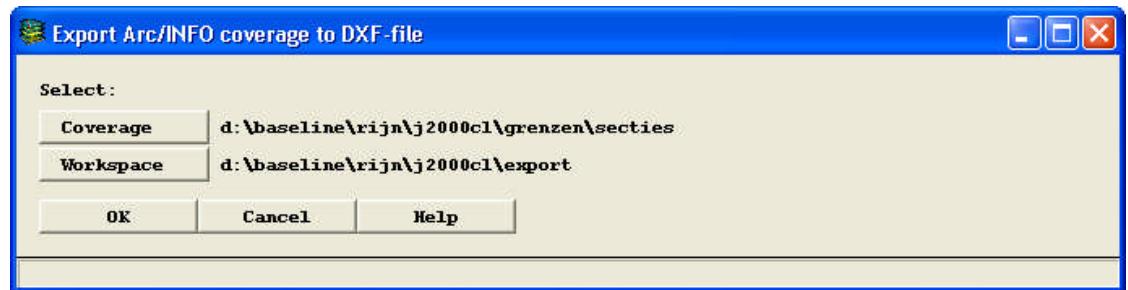
Name for new file: Enter a new name for the coverage to be created.

OK: The coverage name is saved and you are returned to the previous window.

Cancel: The menu is closed. The coverage name is not saved.

Help: This screen.

### 13.3.2 Exporting



#### Export Arc/INFO coverage to DXF-file

---

Click on the corresponding button to select the name of the coverage to be exported and the destination name (workspace).

Select:

Coverage: Click this button to open a window in which a coverage can be selected.

Workspace:

Click this button to open a window in which a workspace can be selected.  
The DXF file will be located in this workspace.  
The workspace must be named EXPORT.

OK:

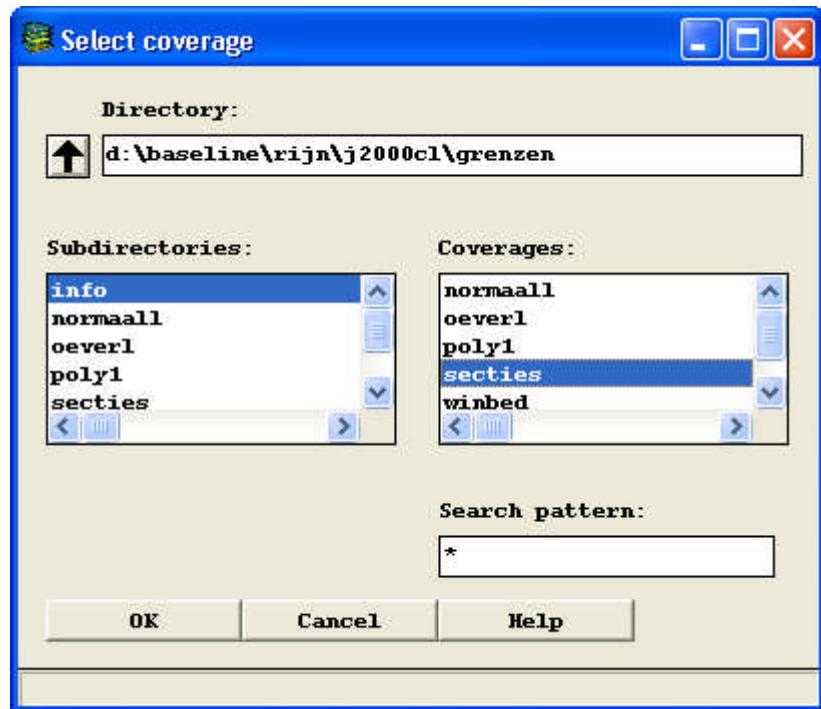
Accept the coverage and workspace selected and start exporting. The DXF export file gets the default name <covername>.dxf

Cancel:

Close the menu and cancel the export.

Help:

This screen.



### Select coverage

---

Use this window to select a coverage for the previous page.

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

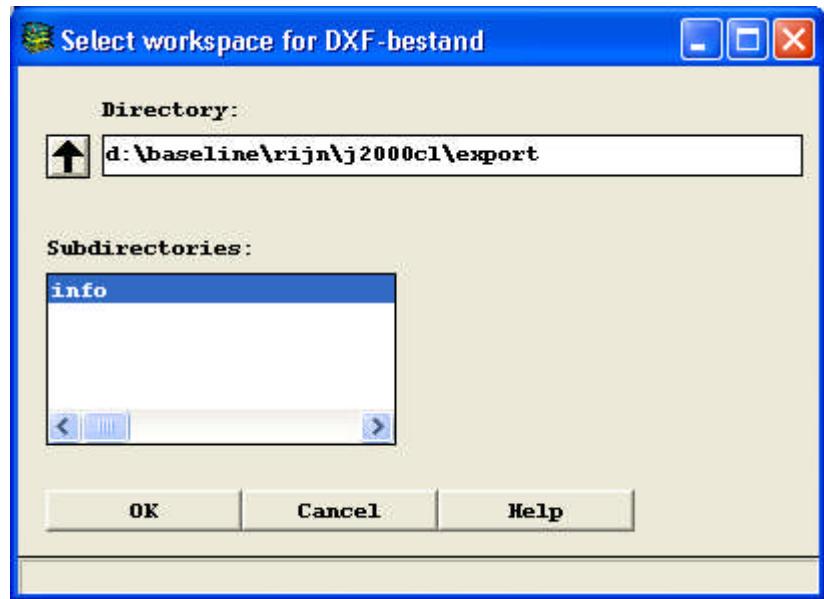
Coverages: Available coverages in the current directory.

Search pattern: Simplify the search procedure by entering one or more letters in combination with an asterisk (\*).

OK: Accept the selected file.

Cancel: Do not make any changes and close the menu.

Help: This screen.



### Select workspace for DXF-bestand

---

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing the subdirectory will define the workspace in which the file is to be created.

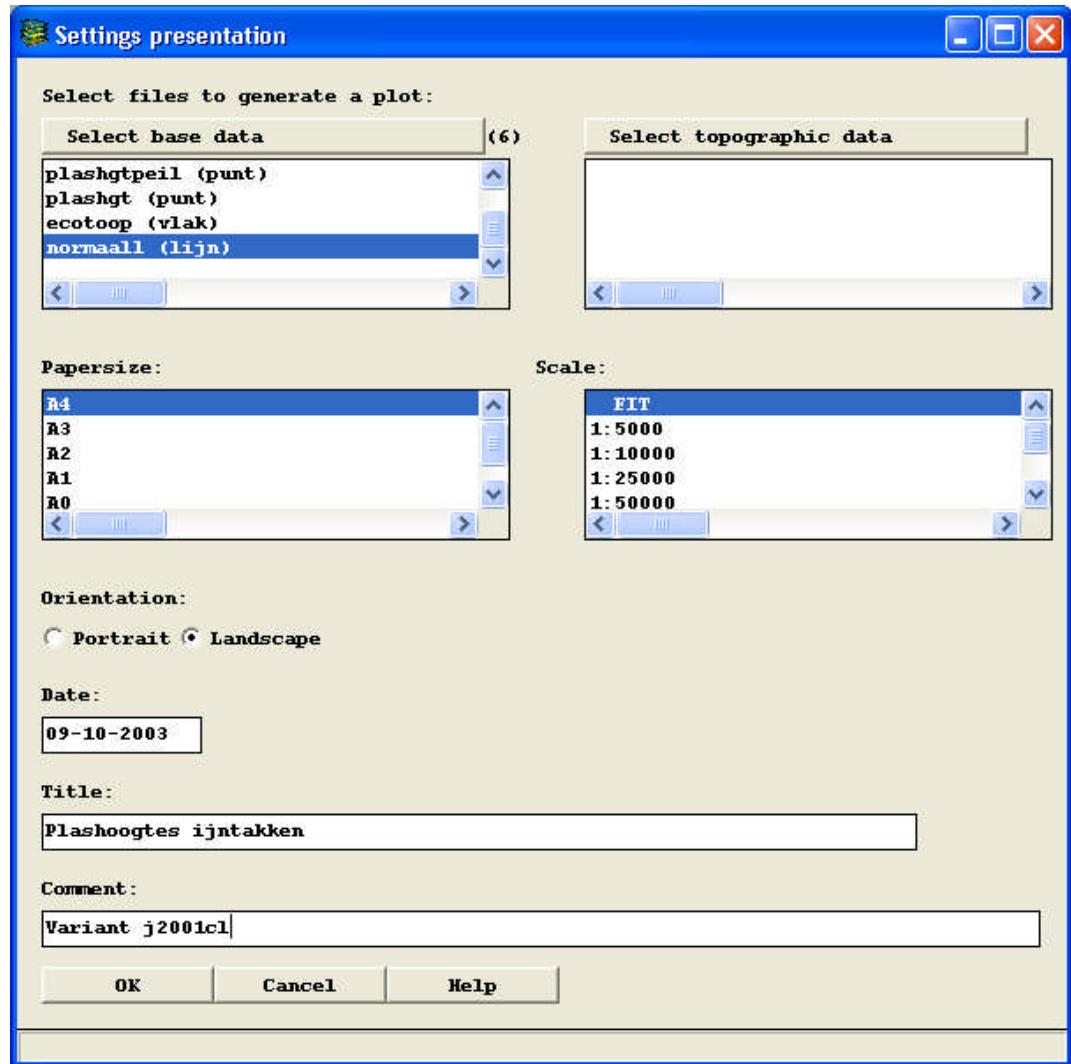
OK: Accept the selected workspace as the workspace in which the new file will be located. The workspace name sometimes has to meet specific requirements. A workspace with an incorrect name will not be accepted by Baseline.

Cancel: Close the menu.

Help: This screen.

## 14 Presentation

### 14.1 Settings



#### Settings presentation

Select files to generate a plot:

Select base data: Click this button to enter the basic file selection window.

Select topographic data: Click this button to enter the topographic file selection window.

Paper size: Click one of the paper sizes to select it.

Scale: The same applies to scale selection. "FIT" means: make sure the entire file is drawn/plotted (no fixed scale).

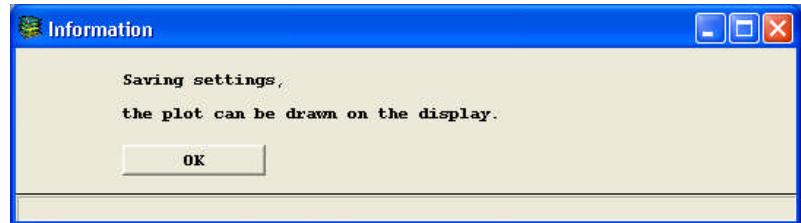
Orientation: Select page orientation: click "Portrait" or "Landscape".

Date: Plotted date. Change (if necessary) by retyping the date.

Title: Enter a drawing/plot title. Excess text will be cut off (a warning will be displayed at the bottom of the window).

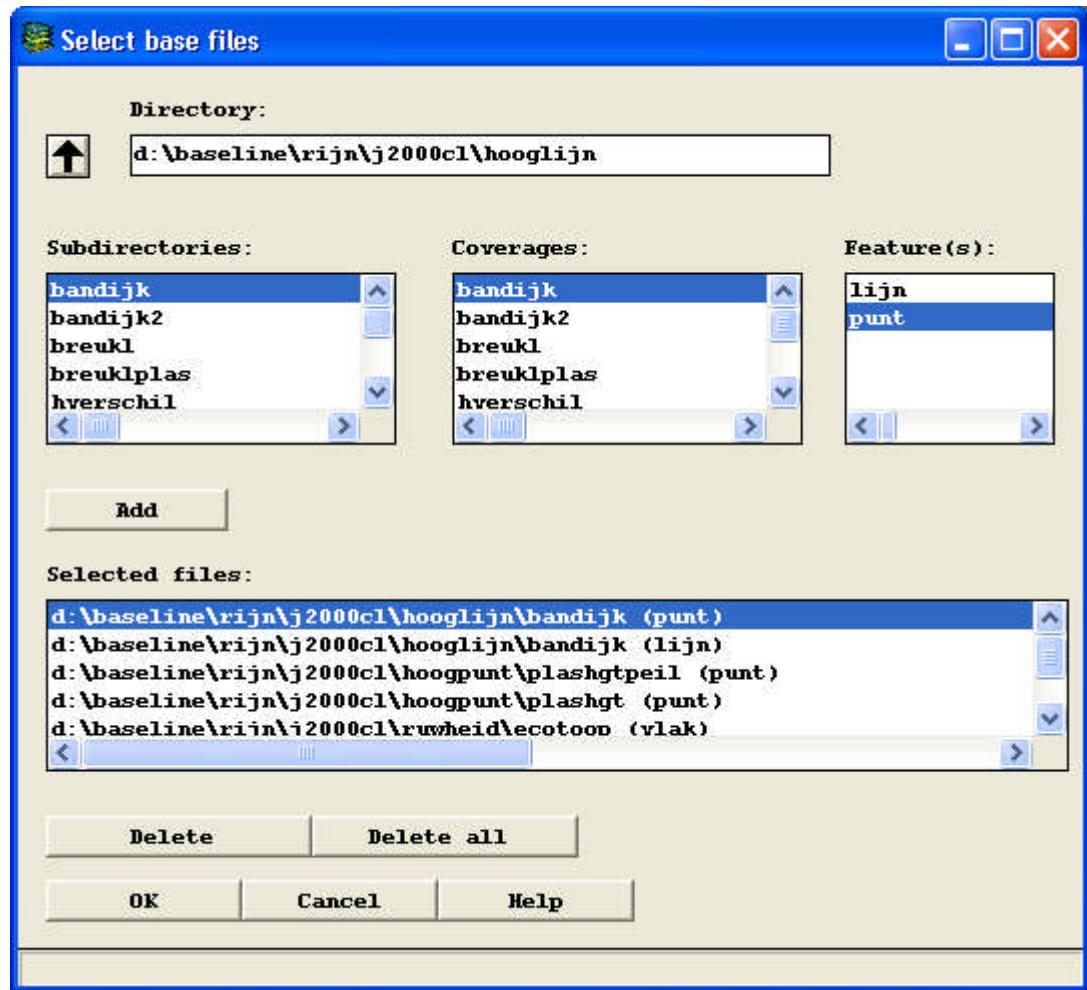
Comment: Enter comment (subtitle).

OK: The settings are saved and you are returned to the previous window.



Cancel: The menu is closed. The settings are not saved.

Help: This screen.



## Select base files

Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory.

Coverages: Files in the current directory. Choosing a coverage will fill/update the feature list.

Feature(s): Select the coverage feature to be plotted. Features: line/poly/point. Repeat the above step to select more features (after clicking the Add button).

Add: Click this button to enter the selection window for the graphical symbol en legend text. Confirm your choice to add the selected coverage and feature to the list.  
If the list already contains the selected coverage/feature, this will be reported at the bottom of the menu.

Selected files: The list of selected coverages/features.

Delete: Use this option to cancel a selection. The file is removed from the "Selected files" list.

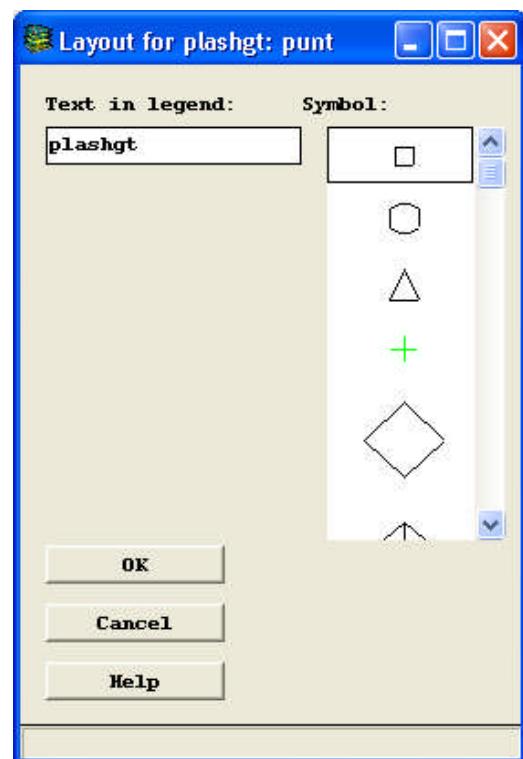
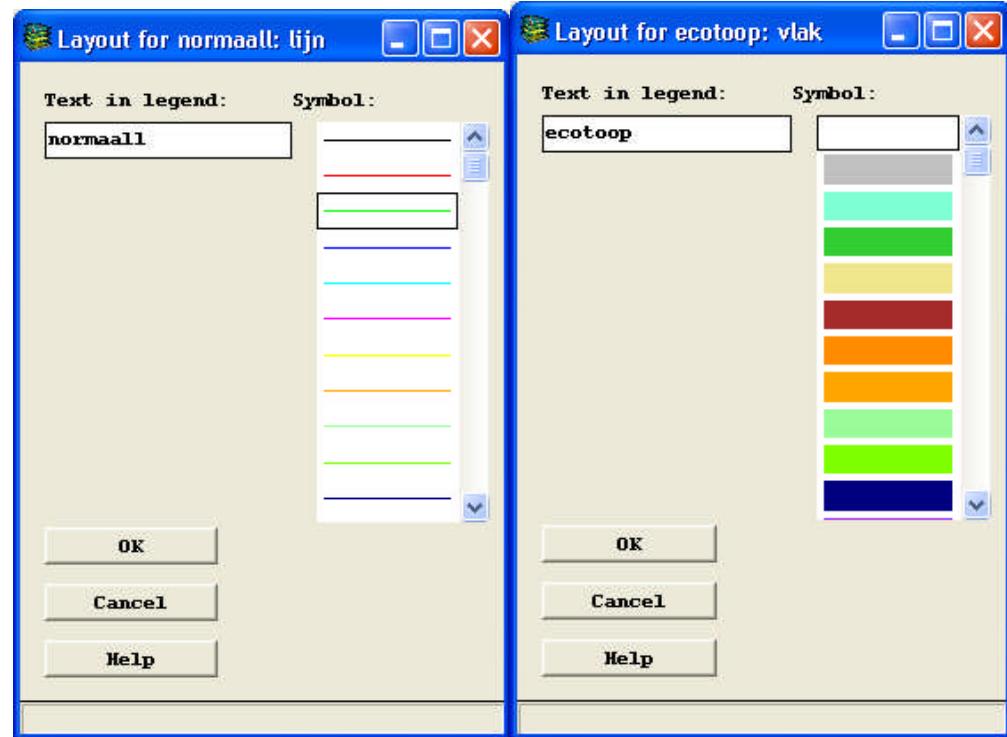
Delete all: The entire "Selected files" list will be emptied.

OK: The basic files to be plotted are saved. You are returned to the previous window.

Cancel: This menu is closed. The "Selected files" list will be emptied.

Help: This screen.

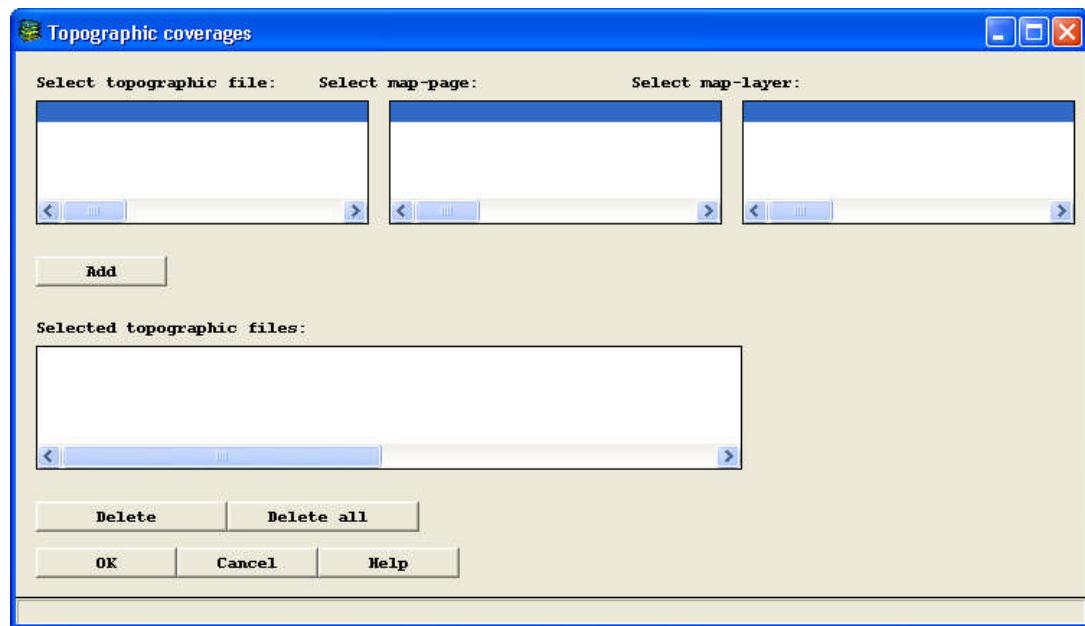
After clicking the Add button, one of the next three windows will be opened:



## Layout for file: Feature

---

Text in legend:	In this field, enter the legend text for the selected file feature. In case of excess text, a warning will be displayed at the bottom of the window.
Symbol:	Select the (line, poly or point) symbol in this field for drawing/plotting the selected file (and feature).
OK:	The file and feature are added to the "Selected files" list of the previous window. You are returned to the previous window.
Cancel:	This menu is closed. The "Selected files" list of the previous window remains unchanged.
Help:	This screen.



## Topographic coverages

---

### Select topographic file:

Make a selection from the topographic files.

### Select map page:

Select map page as background for the area to be plotted.

### Select map layer:

Select the required layer of the map page selected.

### Add:

The selected map layer is added to the "Selected topographic files" list.

### Selected topographic files:

List of selected topographic map layers.

### Delete:

Use this option to cancel a selection. The selected file is removed from the "Selected topographic files" list.

### Delete all:

The entire "Selected topographic files" list will be emptied.

### OK:

The basic files to be plotted are saved. You are returned to the previous window.

### Cancel:

This menu is closed. The "Selected topographic files" list will be emptied.

### Help:

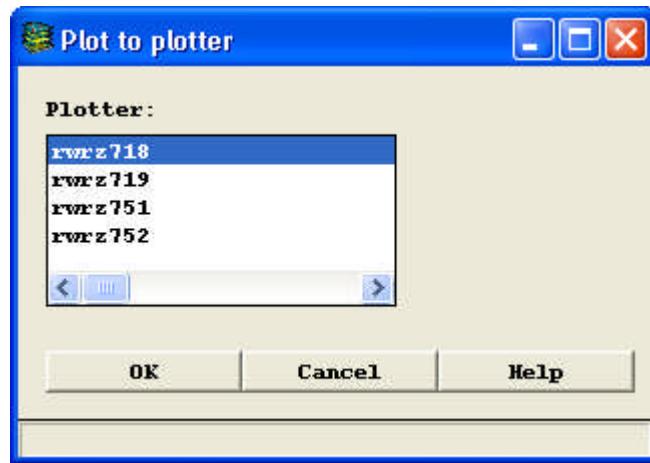
This screen.

## 14.2 Drawing

After clicking this option, the files selected in the Settings window will be drawn. There are no further windows in this option.

## 14.3 Plotting

### 14.3.1 Plotter



#### Plot to plotter

---

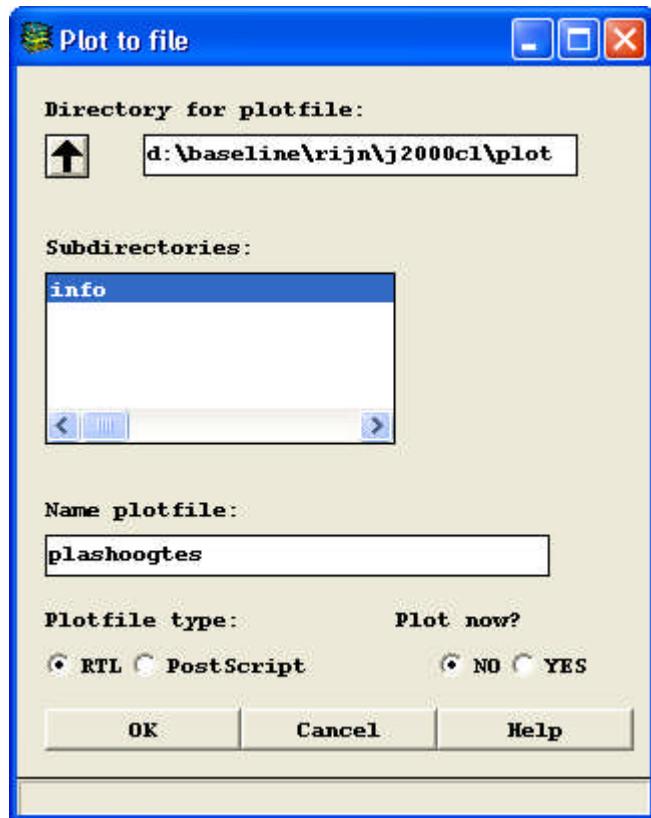
**Plotter:** Select the required plotter for the file to be plotted. The listed plotters are suitable for the paper size specified by you.

**OK:** The plot is sent to the selected plotter. If a selected plotter is not available, a message will be displayed at the bottom of the window.

**Cancel:** The menu is closed. The plot is not sent.

**Help:** This screen.

### 14.3.2 File



#### Plot to file

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Directory: Enter the required directory or select it in the 'Subdirectories' list box.

'Arrow Up': Move up one directory.

Subdirectories: Subdirectories of the current directory. Choosing a subdirectory will change the current directory. The selected subdirectory must be named "PLOT".

Name plot file: Enter a new name for the coverage to be created.

Plot file type: Click this button to select the plot file type.

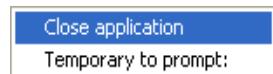
Plot now? (Do not) send the file to the plotter immediately.

OK: The file name is saved and you are returned to the previous window.

Cancel: The menu is closed. The plot file is not saved.

Help: This screen.

## 15 Exiting

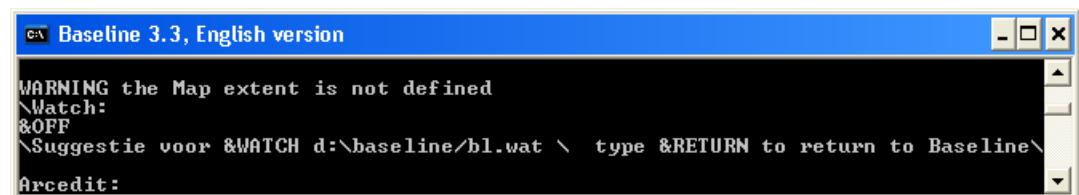


Use the "Close application" function to exit the Baseline application. If the user has modified one or more edit coverages, he will first be asked whether these changes are to be saved.

Clicking Yes on the next question (Do you really want to exit the application?) will close both Baseline and ArcInfo. If Baseline runs on a UNIX platform, you are returned to the UNIX prompt in the Baseline execute directory.



Use the "Temporary to prompt" function to manually execute commands in ArcEdit. Type the command '&return' to return to Baseline.



## Appendix: GIS and ArcInfo Glossary

This appendix defines the GIS and ArcInfo terminology used in the Baseline database and application and the User Manual. It is mainly intended for non-GIS experts who use Baseline in preparation of the activities with flow models.

Workspace:	A level in the hierachic structure of the database, comparable to a directory. ArcInfo coverages are saved in special way, i.e. not in a single file but in a number of files, with ArcInfo automatically updating additional files. This requires a specific organisational structure, which is called a workspace.
Coverage:	An ArcInfo file. ArcInfo does not save data, e.g. summer dikes, in a single file, but in several files which together are called a coverage.
TIN:	An elevation model created using the TIN module (Triangulated Irregular Network), ArcInfo's elevation data interpolation module. A TIN is composed of points and a network of lines. This network is drawn in Baseline.
Feature:	Type elements in an ArcInfo coverage. Examples of features are: polygons, arcs/lines and points. A coverage may contain several features. A building coverage, for example, has only one feature, viz. polygons, whereas a summer dike coverage has two features, viz. lines and points including elevation data on such lines.
Polygon:	ArcInfo term for a plane.
Arc or line:	ArcInfo terms for a line.
Point:	ArcInfo term for a dot.
Attribute or item:	An attribute or item contains administrative information on spatial elements. The elevation attribute in the winbed coverage, for example, contains the elevation data of all elevation points in the floodplain.
Attribute value:	A specific value of an attribute or item. The attribute value of the elevation attribute in the winbed coverage, for example, may be a value of 3.1 (m.+NAL) or 5.4 (m.+NAL) (NAL = Normal Amsterdam Level).
Spatial selection:	The selection of elements (polygons, lines or points) on the basis of their spatial location, for example by clicking separate elements in the screen, by selecting elements within a selected frame or by selecting all elements of a sub-area (for example, in a floodplain).
Logical selection:	The selection of elements on the basis of their attribute values. Example: selecting all elevation points in the floodplain higher than 5.5 metres.
Operator:	Operators are used in designing a logical selection. Some operators are used for selection on the basis of numerical values, others for selection on the basis of text. "Connecting" operators are used for making multiple selections. The operators for numerical values are: =, <, >, <=, >= and <> (<> means: is not equal to). The operators used for selection on the basis of

text are: *cn* (contains), *nc* ((does) not contain) and *lk* (like). The operators for making multiple selections are: *and* and *or*, with *and* being used if both selection criteria must be met and *or* being used if either of the two must be met.

**Clipping:** Cutting out a spatial element, an area of interest, from a coverage, for example all summer dikes in a specific Meuse floodplain. All elements crossing the boundary of the area of interest will be cut off at that boundary.